ANNUAL REPORT

OF THE

CITY ENGINEER

TORONTO

1906

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FOR

1906

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INDEX TO REPORTS.

Works Department Matters.

	PAGE.
Review of Toronto	1
Asphalt Pavements	11
Accountant's Statement	175-178
Bridges, Wharves, etc., repairs	9
Brick Pavements	11
Bitulithic Pavements	12
Cedar Block Pavements	12
Concrete Walks	13
Financial	2
Grade Crossings	3
Island Matters	8
Macadam Roads	11
Official Staff	1
Roadways and Sidewalks	9
Sewage Disposal	2
Street Railway Matters	3
Sewers	7
Track Construction	6
Temperature and Rainfall	7
Tar Macadam Roads	12
Pavements, Roadways, Permanent Sidewalks, etc	75
Table No. 1—Class of Work	77
Table No. 2—Mileage of Pavements, Roadways and Sidewalks laid from 1890 to 1906	79
Table No. 3—Pavements and Roadways, with mileage of same, from 1881 to 1906	78
Table No. 4—Percentage of different classes of Pavements and Roadways	81
Asphalt Pavements	81
Table No. 5—Streets paved with Asphalt on which Contractors' Guarantees have expired	83
Brick and Cedar Pavements	84 & 85
Track Allowance Construction	84
Table No. 6—Date of Final Assessment of different classes of Pavements	87
Detailed Analysis of Asphalt and Mixtures	95
Tar Macadam Pavements	96
Bitulithic	96
Macadam	97 & 102
Concrete Pavements & Walks	98
Day Labor Works	99
Plank Walks	108
Lake Shore Road Retaining Wall	109
Table No. 7—Pavements, Roadways and Permanent Walks laid during year	112
Table No. 8—Mileage of Pavements and Roads, with cost	142
Table No. 9—Mileage of Concrete and Brick Walks	143
Table No. 10—Concrete Walks constructed by day labor	144
Table No. 11—Pavements constructed by day labor	151
Table No. 12—Works constructed as Local Improvements from 1892 to 1906	152
Table No 13—Table Showing Cost of Repairs to Track Allowances	155
Record of Cement Tests, 1906	155
Bridge Engineer's Report	156-163
Sewer Engineer's Report	164-174
Table No. 1—Sewers constructed, 1906	167
Table No. 2—Sewers constructed by day labor, 1906	169
Woodbine District Sewerage System	172

Water Works Matters.

PAGE.

Financial 14
Distribution..... 14
Dredges 16
Electrolysis on Water Mains..... 16
House Services..... 14
High Level Station 15
High Pressure Fire System 15
Main Pumping Station 15
Reservoir 14
Six-foot Conduit 15
Temperature of Water... 16
Water Works Tunnel.....
Report of Deputy City Engineer, re Water Works Construction, Distribution and Maintenance, Sand Pump, etc 17-74
Water Works Schedules..... 25-74
Schedule No. 1—Statement of water pumped by engines Nos. 1 and 2 for 1906 27
Schedule No. 2—Statement of water pumped by engines Nos. 4 and 5 for 1906 29
Schedule No. 3—Statement of water pumped by engine No. 6 for 1906..... ... 31
Schedule No. 4—Record of water re-pumped at High Level Station for 1906 33
Schedule No. 5—Comparative statement of coal consumed to water pumped, 1905-1906..... 35
Schedule No. 6—Comparative statement of water pumped, coal consumed, etc., 1876 to 1906... 37
Schedule No. 7—Water pumped and consumed each month of 1906, with daily consumption... 38

PAGE.

Schedule No. 8—Statement of increase of Department yearly, 1875 to 1906..... 39
Schedule No. 9—Ganging at Rosedale Reservoir, each month of 1906 40
Schedule No. 10—Statement of mains laid during 1906 41
Schedule No. 11—Statement of hydrants placed during 1906.... 45
Schedule No. 12—List of valves placed during 1906..... 48
Schedule No. 13—House services laid 1906 51
Schedule No. 14—House services in use..... 62
Schedule No. 15—Number and size of services in use 64
Schedule No. 16—Meters rebuilt in shop..... .. 65
Schedule No. 17—Meters in use.. 66
Schedule No. 18—Meters inspected and repaired 67
Schedule No. 19—Size and number of meters placed 1906..... ... 68
Schedule No. 20—Temperature water at Lake Shore Crib. 69
Schedule No. 21—Leaks on mains 1906..... 70
Schedule No. 22—Maintenance of distribution, 1906 71
Schedule No. 23—Statement of water pumped and cost of pumping, etc..... 72

INDEX TO PLANS

	PAGE.
Plan showing different classes of pavements and roadways in City	1
Woodbine District Septic Tanks and Bacteria Beds (photo)	8
Track Allowance Construction Plans (3)	6
Rosehill Reservoir (photo)	12
South Water Works Tunnel Shaft (photo)	14
Water Works Expenditure Diagram	16
High Level Pumping Station (photos) (2)	20
New 15,000,000-gal. Pumping Engine (photo)	22
Pavement Fluctuations Diagram, 1896 to 1906	78
Cement Test Diagrams (3)	154
Underground Lavatory Photos (2)	162

TORONTO.

TOPOGRAPHY.—The City of Toronto is situated upon the northern shore of Lake Ontario, about forty miles easterly of its western terminus. It lies in latitude 43° 39′ 10″ north, longitude 79° 23′ west, on a plateau gently ascending north for a distance of three miles, where an altitude of about 220 feet above the lake level is reached. It extends about eight miles along the lake, and is generally level, with slight depressions at points where minor water courses previously existed. The harbor is formed in front of the City by a sandy island, which lies to the south, at a distance of about a mile and a half.

Toronto is the capital of the Province of Ontario, and in it are situated the Provincial Parliament Buildings and Government House, the residence of the Lieutenant-Governor of the Province.

STATISTICS.

AREA.—The area within the City limits, not including the portions of the City land covered by water, is 17.83 square miles.

POPULATION.—The population of the City is about 295,000.

PUBLIC STREETS AND LANES.—Within the City limits there are 277.41 miles of streets and 85 miles of lanes, of which 197.24 miles are paved, and 80.17 miles unpaved.

PAVEMENTS AND ROADWAYS.—

Asphalt	63.71	miles
Cedar block	40.53	"
Brick	18.58	"
Macadam	54.39	"
Wood on concrete	0.51	"
Stone and scoria block	1.74	"
Gravel	5.83	"
Bitulithic	5.98	"
Tar macadam	5.70	"

SIDEWALKS.—

Stone flag	1.821	miles
Concrete	227.639	"
Brick	3.463	"
Wood	205.000	"

SEWERAGE.—The City is drained by what is known as the combined system of sewers, and there are 245.11 miles of sewers.

WATER WORKS.—The Water Works system is owned and operated by the City, the supply being obtained from Lake Ontario through a 6-ft. steel conduit laid across Toronto Island to a crib near Hanlan's Point, and from thence through a 4-ft. steel pipe, and a 3-ft. cast iron pipe laid under Toronto Bay to the Main Pumping Station on the water front, the water being pumped through the City mains, the surplus going to the Reservoir situated north of the north City limits. Cost of system to date, about $4,000,000.

STATIONS AND ENGINES.—

Main Pumping Station.

No. 1	Engine,	4,000,000	gals.	capacity, 24 hours.
" 2	"	8,000,000	"	" "
" 4	"	10,000,000	"	" "
" 5	"	10,000,000	"	" "
" 6	"	15,000,000	"	under construction.

High Level Pumping Station.—Two engines with a total capacity of 6,000,000 gallons in 24 hours.

Island Pumping Station.—One engine 500,000 gallons capacity in 24 hours.

293.552 miles of water mains.
58,273 water services.
3,423 street hydrants.
2,725 valves.
2,513 meters in use.

WATER RATES.—Average schedule, 2½ cents per 1,000 gallons and by meter, 10 cents per 1,000 gallons.

50,000 water takers.
Pressure—Domestic and fire, 50 to 90 lbs.
Average quantity pumped in 24 hours, 27,012,291 gallons.
Water consumed annually, 9,859,486,414 gallons.
Fuel used—soft coal screenings.
Cost of fuel during 1906, $39,713.57.

General receipts, constructing and moving services, etc..	$ 14,930	88
Revenue collected in 1906 by schedule rate.....	209,927	49
" " " meter rate	200,357	64
Charges made against different branches of City service for water used	76,994	00
Total.....	$ 502,210	01

Operating expenses, including cost of collecting rates and debt charges.....	$ 447,242	49
House services, pipe laying and renewals.....	70,195	75
Total	$ 517,438	24

FIRE PROTECTION.—

211 officers and men in brigade.
76 horses.
63 pieces of apparatus for various purposes.
3,423 fire hydrants.
18 fire stations.
7 steam fire engines.

POLICE PROTECTION.—

368 officers and men.
1 squad of 9 mounted men and one sergeant.
1 patrol sergeant.
3 patrol wagons.
1 prison van.
1 headquarters and 7 stations.
81 patrol signal boxes.

MILITARY.—There are two regular corps stationed in the City (one mounted and one infantry), at Stanley Barracks, near the site of old Fort Rouille, and five militia corps (two mounted and three infantry), all of which have first-class bands and the use of well-equipped and commodious Armouries.

LIGHTING.—There are 3 lighting companies doing business in the City. The Consumers' Gas Co. have 323 miles of mains, and 43,860 consumers. Carbon Light & Power Company have 1,026 street lights. Toronto Electric Light Company have 1,370 street electric arc lights, 900 private business arc lights, about 200,000 private business incandescent electric lights, and also 990 miles of overhead and underground wire, and 65 miles of underground conduit.

TELEPHONE AND TELEGRAPH SERVICE.—The Bell Telephone Company is the only company doing business in the City. They have 21,000 telephones in use, 20,000 miles of overhead, 40,000 miles of underground wires, 24 miles of underground conduit, and 200 miles of ducts.

There are two telegraph companies doing business in the City, the Great North-Western Telegraph Company, with 70 sets of instruments and 250 miles of overhead wires; and the Canadian Pacific Railway Telegraph Company.

PUBLIC PARKS.—The Public Parks of the City are under the control of the City Council. There are 33 public parks, having a total area of about 1,660 acres.

EDUCATION.—The educational system is under the direction of the Board of Education and the Separate School Board. There are 57 public schools, having a total of 621 rooms, with a staff of 735 principals and teachers. Three collegiate institutes and 1 technical high school with a staff of 78 principals and teachers. Eighteen separate schools with a staff of 99 principals and teachers.

2 Industrial Schools (Protestant.)
1 Industrial School (R. C.)
30 Colleges, Seminaries and Pay Schools.
1 Technical School.
5 Universities.
3 Cathedrals of all denominations.

216 Churches of all denominations.
4 Synagogues and several Jewish Churches.
48 Missions.
5 Mission Training Schools.
9 Convents.

PUBLIC LIBRARY.—There is a Reference Library containing 62,872 volumes, and six Circulating Libraries containing in all 74,360 volumes. These are placed in different parts of the City. A new Reference Library building is in course of erection at a cost of $275,000.

PUBLIC INSTITUTIONS.—

62 Hospitals, Asylums and Public Homes.
3 Institutions for destitute and criminal classes.

LAW.—Toronto is the centre of the Law System of the Province of Ontario, having 27 Law Courts within its limits.

AMUSEMENTS.—

8 Theatres.
32 Music, Concert Halls and Vaudeville Houses.
Zoological Gardens.
238 Public Buildings, Halls, etc.

PUBLIC ACCOMMODATION.—

184 Hotels.
2,700 Boarding Houses.

RAILWAYS.—There are two railway companies whose systems enter Toronto, namely: the Grand Trunk Railway, with about 85 miles of track laid in the City limits.

The Canadian Pacific Railway Company, with about 31 miles of tracks laid in the City limits.

94 Passenger trains enter and leave the City daily.
180 Freight trains enter and leave the City daily.

The Toronto Railway Company has the exclusive franchise for operating a street railway system within the City limits. They have 90.936 miles of tracks, about 305 cars in operation, and carried 76,958,488 passengers during 1906.

BUSINESS.—

6 daily newspapers; 49 weekly; 20 semi-monthly; 76 monthly, and 8 quarterly newspapers and periodicals; two directory companies.

5 Public markets.
36 Banks, not including branches.
980 Factories and manufactories.
386 Wholesale houses.
8 Departmental stores.
6,700 Miscellaneous business companies, corporations and stores.

SANITATION.—

Street Cleaning, Watering and Scavenging.—A modern and complete system of street cleaning, watering and scavenging is owned and operated by the city.

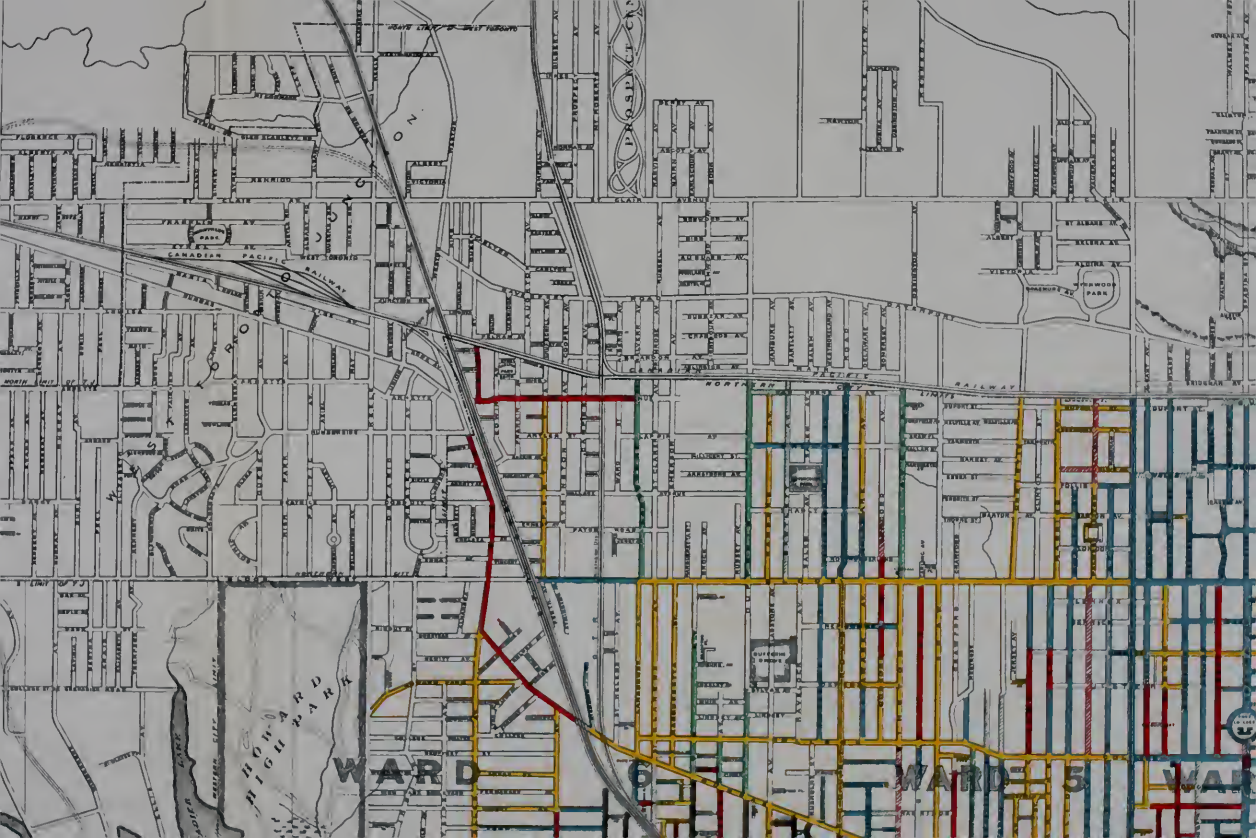
The supervision of the sanitary requirements of the City is under the control of the Local Board of Health.

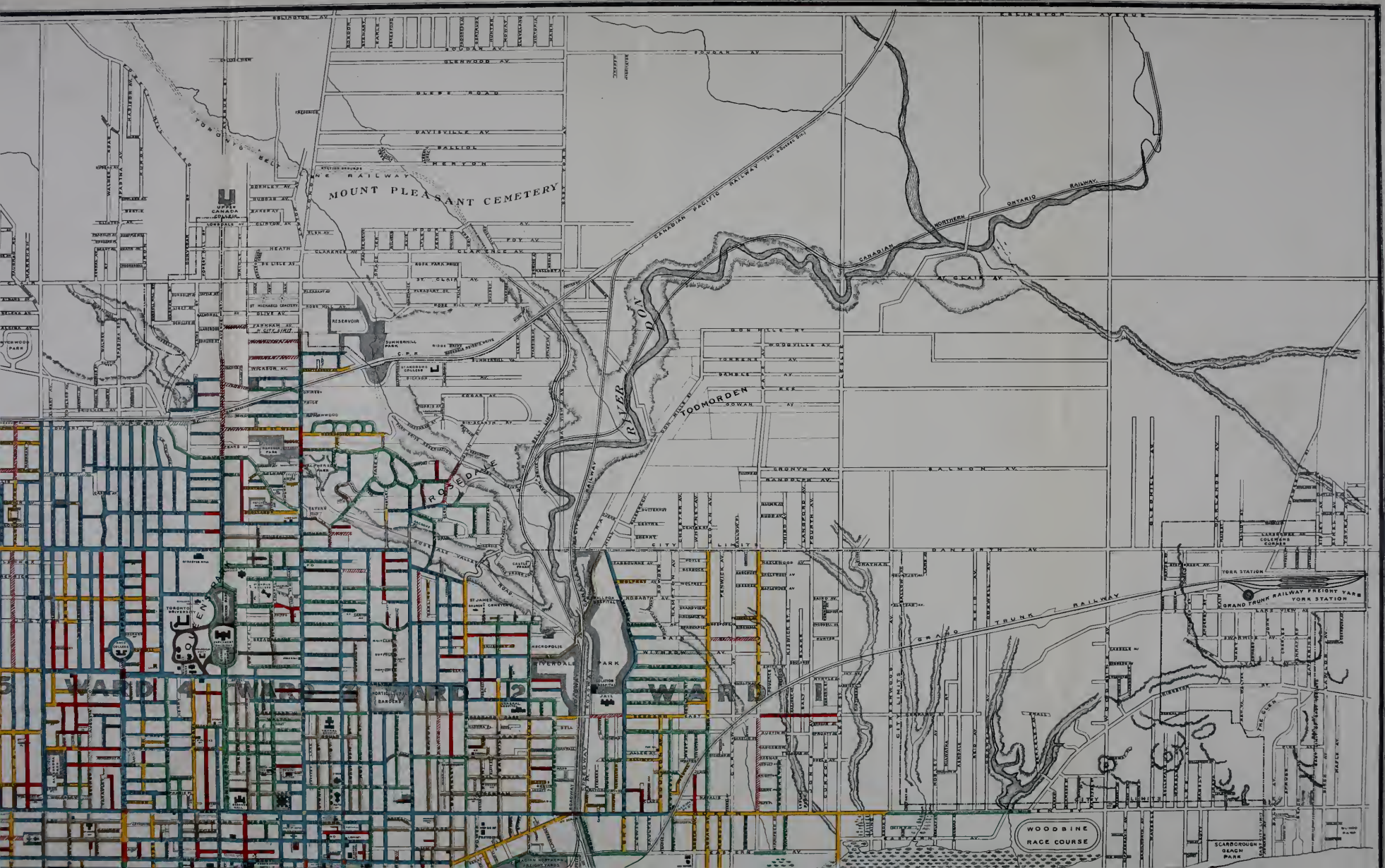
The foregoing brief review of Toronto is annually compiled by

GEO. J. CASTLE,
Secretary to City Engineer.

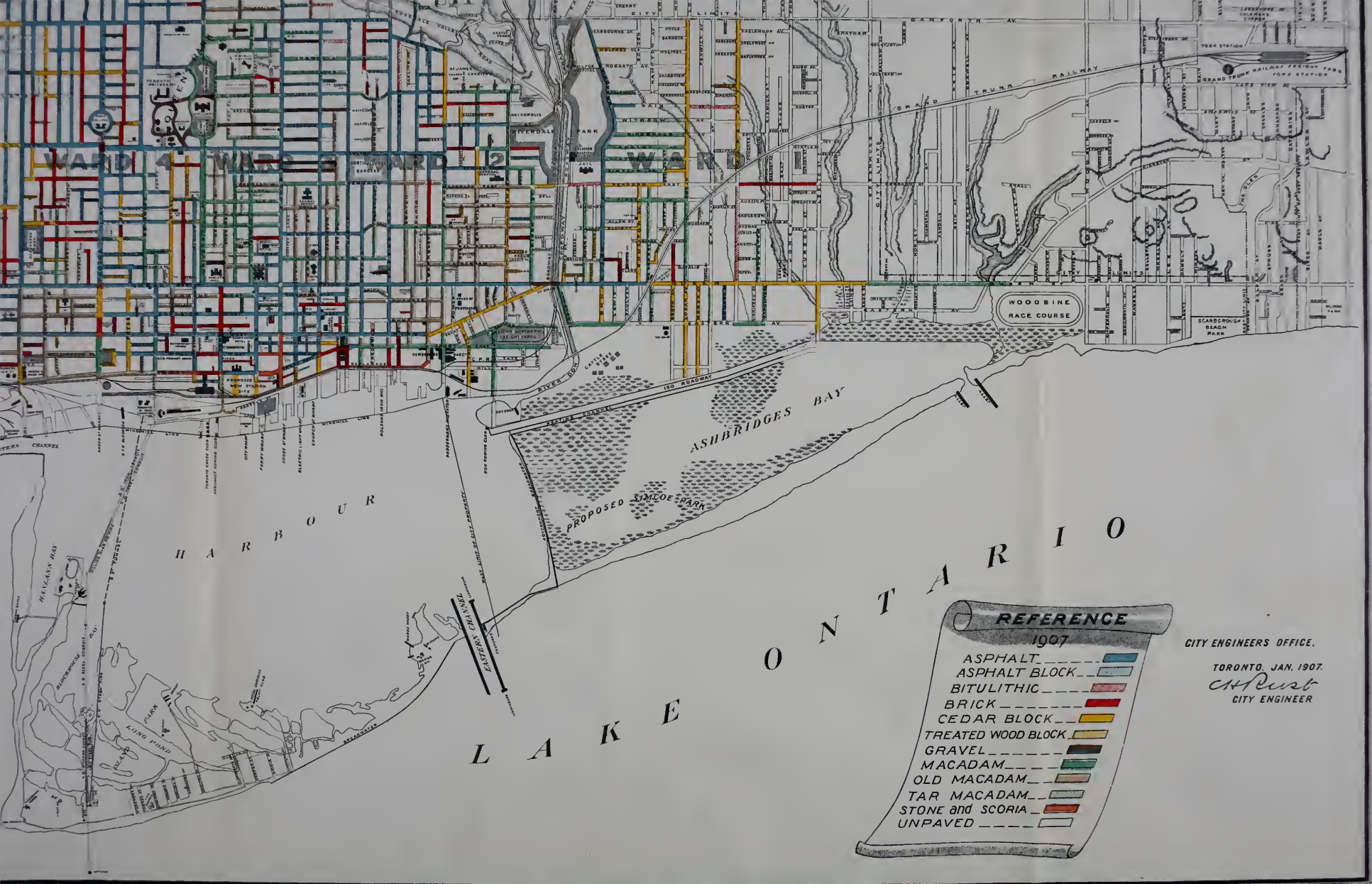
PAST CITY ENGINEERS OF TORONTO.—

1840-1842, Thomas Young.
1843-1852, John G. Howard.
1853, William Thomas.
1854, John G. Howard.
1855, William Kingsford.
1856, Thomas H. Harrison.
1857-1858, Thomas Booth.
1859-1860, Alfred Brunel.
1861-1870, J. H. Bennett.
1871-Oct., 1875, Chas. W. Johnston.
Oct. 1875-July, 1880, Frank Shanly.
Sept. 1880-July, 1883, R. J. Brough.
Oct. 1883-1889, Charles Sproatt.
1890-Sept., 1891, W. T. Jennings.
Sept. 1891-May, 1892, Granville C. Cunningham.
May, 1892-Jan., 1898, E. H. Keating.


WARD 6
WARD 5
WARD
HOWARD PARK
CANADIAN PACIFIC RAILWAY
NORTHERN RAILWAY


MOUNT PLEASANT CEMETERY
RESERVOIR
TODMORDEN
RIVERDALE PARK
WARD 5
WARD 4
WARD 3
WARD 2
WARD 1
WOODBINE RACE COURSE
SCARBOROUGH BEACH PARK
YORK STATION
GRAND TRUNK RAILWAY FREIGHT YARD
CANADIAN PACIFIC RAILWAY
GRAND TRUNK RAILWAY
ONTARIO NORTHERN RAILWAY
DON RIVER
DANFORTH AVENUE
KINGSTON ROAD
QUEEN STREET
BLOOR STREET
GERRARD STREET
DUNDAS STREET
CARLTON STREET
WELLESLEY STREET
BLOOR STREET
BATHURST STREET
YONGE STREET
PARLIAMENT STREET
SHERBOURNE STREET
CHURCH STREET
JARVIS STREET
CASTLE FRANK ROAD
TORONTO UNIVERSITY
ST. JAMES CEMETERY
NECROPOLIS
GENERAL HOSPITAL
EASTERN HOSPITAL
ST. MICHAEL'S HOSPITAL
ST. MICHAEL'S COLLEGE
TORONTO GENERAL HOSPITAL
CITY LIMITS

WARD 6
WARD 5
WARD 4
HOWARD HIGH PARK
HUMBER BAY
PARK
OLD FORT
NEW FORT
WESTERN CHANNEL
HARBOUR
HANLANS BAY
LONG POND
PLAN
of the
CITY OF TORONTO
SCALE. 2000 FEET TO 1 INCH
ALEXANDER & CABLE LITH. CO. LTD


WARD 4
WARD 5
WARD 12
WARD
RIVERDALE PARK
WOODBINE RACE COURSE
SCARBOROUGH BEACH PARK
GRAND TRUNK RAILWAY
YORK STATION
CITY LIMITS
RIVER DON
150 ROADWAY
ASHBRIDGES BAY
PROPOSED SIMCOE PARK
HARBOUR
LAKE ONTARIO
EASTERN CHANNEL
LONG POINT
REFERENCE
1907
ASPHALT
ASPHALT BLOCK
BITULITHIC
BRICK
CEDAR BLOCK
TREATED WOOD BLOCK
GRAVEL
MACADAM
OLD MACADAM
TAR MACADAM
STONE and SCORIA
UNPAVED
CITY ENGINEERS OFFICE.
TORONTO, JAN. 1907.
CITY ENGINEER

ANNUAL REPORT

OF THE

CITY ENGINEER

OF THE

CITY OF TORONTO

FOR THE YEAR 1906.

CITY ENGINEER'S OFFICE,
Toronto, December 31st, 1906.

To His Worship the Mayor and Members of the Council of the Corporation of the City of Toronto:

GENTLEMEN,—In compliance with By-law No. 2534, I have the honor to lay before you the Annual Report of the Department for the year ending 31st December, 1906, setting forth the various works carried out during the year, with details of cost of construction and suggestions and recommendations as to new works and improvements required.

OFFICIAL STAFF.

The following is a list of the chief officials of the Department:

City Engineer and Chief Engineer and Manager of the Water Works	Charles H. Rust, M. Can. Soc. C.E., M. Am. Soc. C. E.
Deputy City Engineer	C. L. Fellows, M.Can.Soc.C.E.
Asst. Engineer in charge of Bridges	John Williams, M.Can.Soc.C.E.
Asst. Engineer in charge of Roadways	W.M.Macphail, M.Can.Soc.C.E.
Asst. Engineer in charge of Sewers	J. D. Shields.
Accountant	Wm. McCartney.
Chief Clerk	E. P. Roden.
Secretary Committee on Works	A. H. Clarke.
Secretary to City Engineer	Geo. J. Castle.
Chief Engineer Main Pumping Station	Alex. McRae.
Chief Engineer High Level Pumping Station	Thos. Walsh.
Foreman of Water Works Construction	Edward Foley (deceased July, 1906).

FINANCIAL.

During the year just closed the amount of money expended and the work carried out exceeds any previous year, and I am pleased to point out to your Council that most of the work has been of a permanent character.

The total expenditure of the Department, including Water Works, amounted to $1,992,421.88, which was divided as follows:

Water Works	$586,859 51
General and special works	294,125 31
Street Railway track allowance pavements	141,442 41
Local Improvements	880,735 21
Departmental and sundry accounts	82,794 49
Island Works	6,464 95
Total	$1,992,421 88

Expenditure upon Local Improvements was divided as follows:

Roadways	$535,805 37
Concrete walks	217,102 18
Brick walks	548 92
Plank walks	2,869 40
Sewers	113,936 75
Street openings, extensions, etc	10,472 59
Total	$880,735 21

This is an increase of $296,052.79 over last year, and is the largest amount expended by this Department on Local Improvement works in any one year.

SEWAGE DISPOSAL.

Acting under instructions from your Council, I proceeded to England at the end of June and consulted Mr. G. R. Strachan, Mem. Inst. C. E., 9 Victoria Street, Westminster, London, England, in connection with this matter, and Mr. Strachan submitted a report upon this subject endorsing the recommendation made by me that the crude sewage could be disposed of in the Lake at a distance of nine miles east of the intake pipe without any danger of contaminating the water supply.

A By-law was submitted to the ratepayers asking them to vote a sufficient amount of money to enable the City to proceed with the construction of the intercepting sewers, leaving the question as to the final disposition of the sewage to be settled afterwards. The Provincial Board of Health endorsed this suggestion. Unfortunately the ratepayers did not approve of this By-law.

I need not point out to your Council the importance of having this matter settled at an early date, and I would suggest that an application be made to the Provincial Board of Health asking the Board to reconsider their determination not to allow crude sewage to be emptied into the Lake, and that, if possible, Mr. Strachan should be asked to come to this country to give evidence before the Board.

I would also recommend that the services of Mr. Rudolphe Herring and Mr. S. M. Gray, who reported upon the question of sewage disposal some years ago, be also obtained.

GRADE CROSSINGS.

Very little progress has been made towards abolishing grade crossings in the City. An application has been made to the Board of Railway Commissioners to approve of the construction of a high level bridge across the Don River at Queen Street, and the plans have been practically approved of, but the Board have not yet apportioned the cost of the bridge between the City and the Railway Companies, so that the final order of the Board has not as yet been issued.

Nothing further has been done towards the depression of tracks through Parkdale, owing to the Grand Trunk Railway Company desiring the City to bear one-half of the cost, which proposition was not entertained.

In connection with the Lansdowne Avenue Subway, the Board of Railway Commissioners have ordered that the whole cost of this work should be borne by the City. A By-law was submitted to the ratepayers who approved of the expenditure and the contracts have been awarded and the work will be commenced early in 1907.

STREET RAILWAY MATTERS.

During the past year the usual litigation between the City and the Street Railway Company has taken place. It is to be regretted

that this continuous litigation should take place when the City and the Company are so much interested, and when our interests are so interwoven it seems a pity that we cannot get together and amicably arrange these difficulties without resorting to the Courts.

Last year the City derived a large revenue from the operations of the Company, the total amount being $427,409.

A number of extensions were carried out during the year and the Company was authorized to construct loops on Richmond Street, Victoria Street, Scott Street and Wellington Street. The construction of these loops by shortening the car mileage has enabled the Company to give a better service to the citizens, and the Company have also placed on the various routes a large number of new cars.

There is, however, still considerable overcrowding and a certain amount of congestion exists on Yonge Street, between Front Street and Queen Street. Owing to the number of cars which have to be operated over this line during the rush hours, it is absolutely necessary that a relieving line should be constructed at once parallel and as near as possible to Yonge Street. Bay Street is the only line which meets these conditions, and tracks should be constructed upon this street at once from Front Street to Queen Street, and upon Teraulay Street to College Street: from College Street a line should be constructed to Bloor Street either through the Park or by way of St. Vincent and North Streets.

This congestion of traffic in the business portion of cities is a very grave problem and one which is constantly causing officials—both street railway and municipal—considerable trouble.

The cause of this congestion in Toronto is the concentration of our business interests into a small area. This is further aggravated by the narrow width of our streets; the sidewalks not being of a sufficient width and are consequently crowded, and the roadway is also very much overcrowded with vehicles.

It appears to me that it would be advisable to have some regulations passed limiting vehicular traffic say on Yonge Street, between King and Queen Streets. There are a great many vehicles driven upon this street which could just as well use other streets.

After a great deal of negotiations the Company commenced to relay the rails on Queen Street and completed the work as far as Spadina Avenue before work was suspended for the winter. The Company took up and relaid the pavement at their own expense, the City supplying new blocks wherever required.

An examination was made of the ties and concrete, which work was done in 1892, and the ties were found to be in a very good condition, the majority of the ties were soaked with water, the concrete was also in good condition.

The following additional street car lines were laid during the year:

Avenue Road, from old City Limits to St. Clair Avenue.
Gerrard Street, from Pape Avenue to Greenwoods Avenue.
Lansdowne Avenue, from College Street to Bloor Street.
Richmond Street, from York Street to Victoria Street.
Victoria Street, from Richmond Street to Queen Street.
Scott Street, from Front Street to Wellington Street.
Wellington Street, from Scott Street to Yonge Street,

making a total of 3.398 miles.

In connection with the construction of these extensions the devil strip was made 5 feet wide in place of 3 feet 9 inches.

On Avenue Road, Dupont Street and Gerrard Street East, the Company were allowed to use a seventy-pound T-rail seven inches in depth. In the report of the Assistant Engineer in charge of roadways, there is a sketch showing the rail and the manner of constructing the pavement.

While I think this rail will answer all the requirements on streets where there is not much traffic, I would not feel warranted in allowing the Company to use this type of rail in the business parts of the City, where, owing to the narrow width of our streets, there is necessarily a great deal of vehicular traffic upon the track allowance.

The following tables show the number of iron poles erected and painted during the year.

IRON POLES ERECTED BY THE TORONTO RAILWAY COMPANY DURING 1966.

Avenue Road, from old City Limits to St. Clair Ave	38
Bloor Street, from w.s. Bathurst Street to e.s. Dufferin Street	108
Broadview Avenue, from Queen Street to Danforth Avenue	125
College Street, opposite Nos. 1045-1047	1
Dupont Street, from Walmer Road to Christie Street	56
Dufferin Street	31
Lansdowne Avenue, from Dundas Street to Bloor Street	54
Ossington Avenue, from Dundas Street to College Street	32
Richmond Street and Victoria Street loop	36
Scott Street and Wellington Street loop	9
	490

490 Iron Poles were painted during the year.

On all the Company's double truck cars they have now the Magann Air Brake, which is proving very satisfactory.

The usual records have been made of the running of cars and weekly reports are sent to the City Solicitor and Board of Control. The amount expended during the year in connection with this matter was $7,569.49.

TRACK CONSTRUCTION.

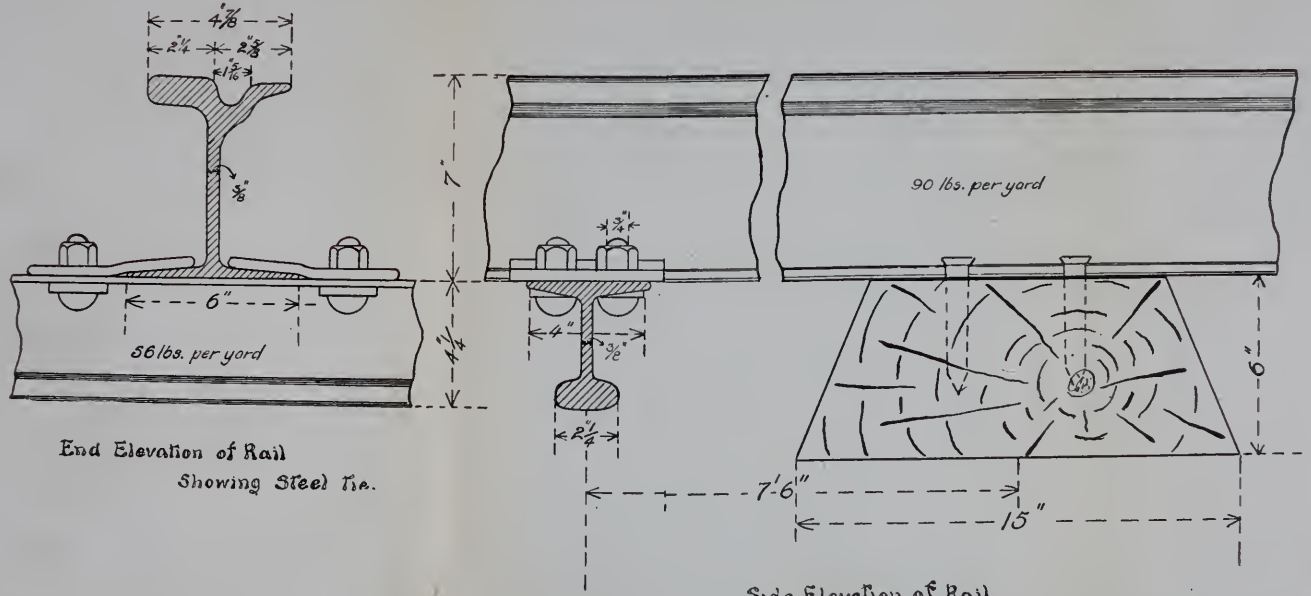
In the construction of the track allowance the foundation was reinforced concrete by means of old 4½-inch T-rails cut into 6½-feet lengths, which were placed in an inverted position at intervals of 15 feet. At the middle point between these ties, wooden blocks were imbedded in the concrete in such positions that at every 15 feet there would be one block under each rail. The dimensions of these blocks were 10 inches square at the top, 15 inches square at the bottom by 6 inches in depth: the rails used were 62 feet in length, weighing 90 lbs. per yard, a large wooden tie being placed under each joint.

Attached to the report of the Assistant Engineer in charge of Roadways, there is a detail plan showing method of construction.

This method of construction is the closest approach yet attained by this Department to an absolutely rigid bond between the concrete foundation and the rails.

Details of Steel Tie Construction

Scale - 3 in. = 1 ft.



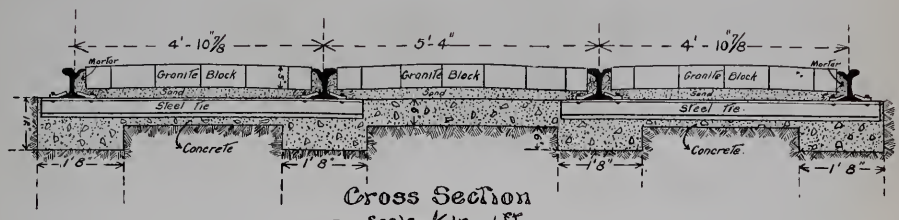
End Elevation of Rail
Showing Steel Tie.

Side Elevation of Rail
Showing Steel Tie and Wooden Block

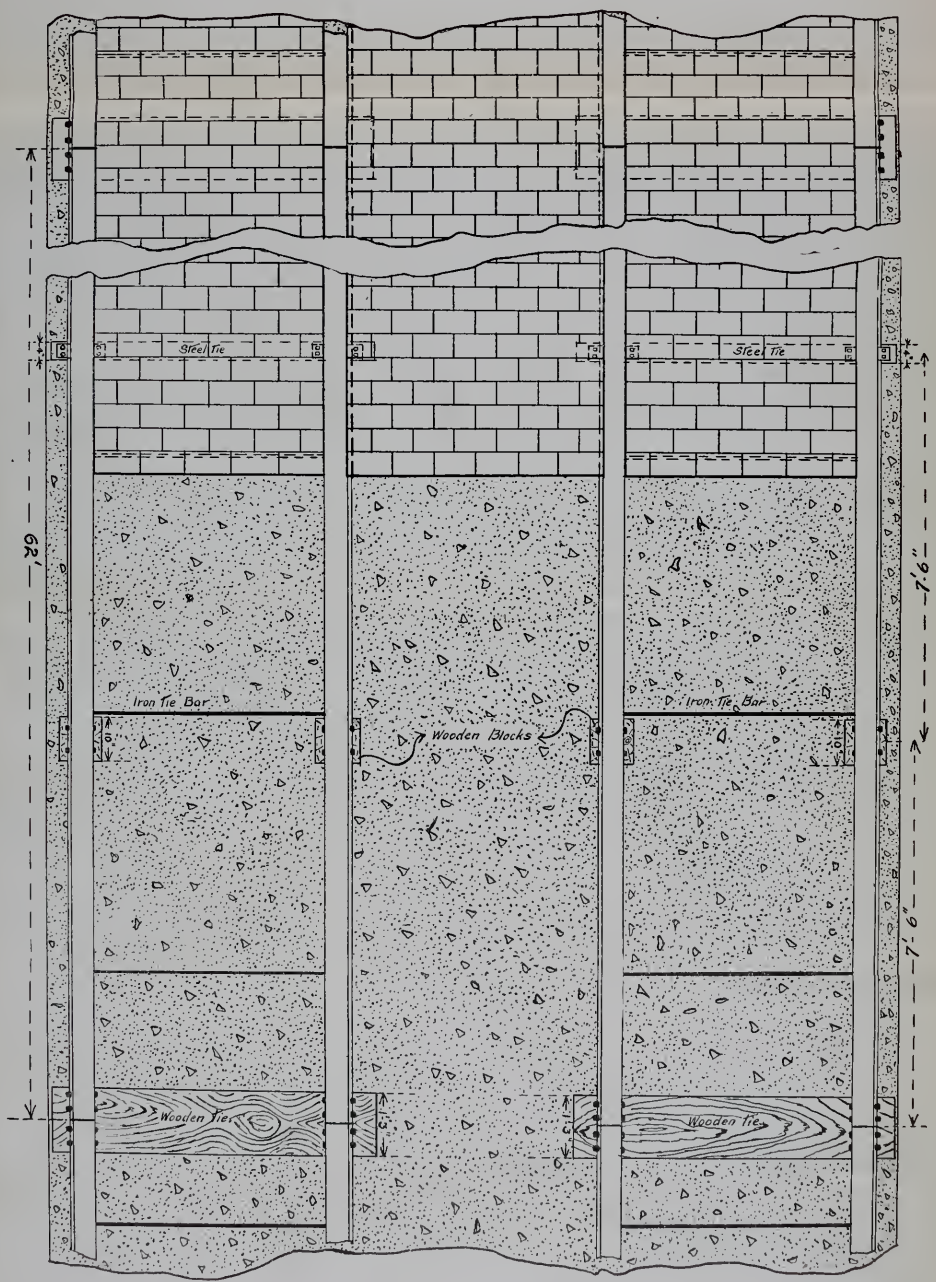
C. A. Ruel
City Engineer

City Engineers Office Toronto
December 31st 1906.

Typical Track Allowance
1906



Cross Section
— Scale — ½ in. = 1 ft. —

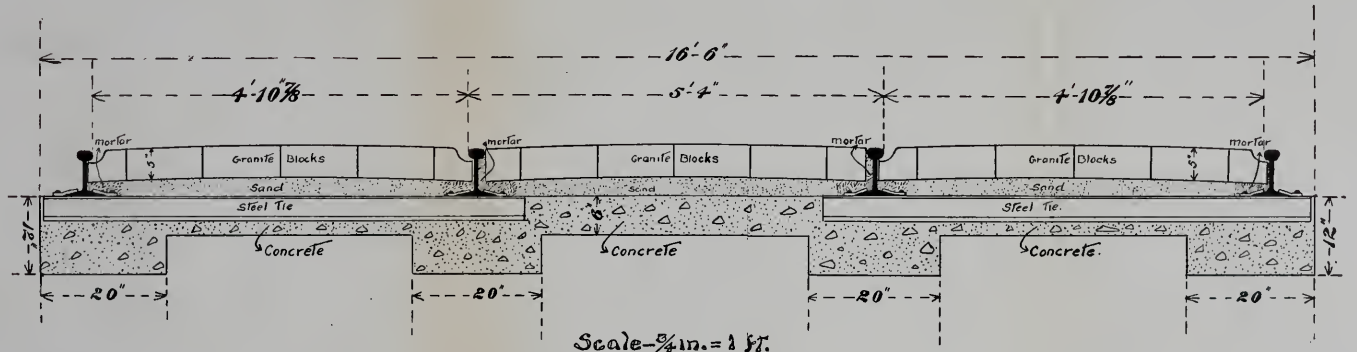


Plan of Tracks

City Engineer

City Engineers Office Toronto
December 31st 1906

Cross Section
of
Track Allowance with T Rail.



Scale-¾in.=1 ft.

C. H. Rust
City Engineer

City Engineers Office Toronto
December 31 1906

TEMPERATURE AND RAINFALL.

Through the courtesy of Mr. R. F. Stupart, Director of the Meteorological Department, a table is attached showing the temperature and rainfall during the year:

STATEMENT OF MONTHLY TEMPERATURE AND PRECIPITATION AT TORONTO, 1906.

Months.	Temperature.			Precipitation.		
	Mean.	Highest.	Lowest.	Rain.	Snow.	Total.
	°			in.	in.	in.
January	30.9	56.1	4.4	1.32	4.3	1.75
February	21.8	53.0	12.8	0.44	3.6	0.80
March	26.8	49.7	0.2	1.32	12.3	2.55
April	44.1	69.2	27.3	1.50	1.1	1.61
May	53.2	85.0	32.1	2.51	.....	2.51
June	65.1	88.9	43.1	3.87	.....	3.87
July	69.6	89.2	52.5	3.40	.....	3.40
August	71.0	87.7	53.2	1.83	.....	1.83
September	64.2	89.3	38.8	3.67	.....	3 67
October	48.3	72.2	27.0	4.21	2.8	4.49
November	37.1	58.4	22.7	1.60	0.8	1.68
December	22.9	48.9	8.1	1.54	12.8	2.82
Year	46.3	84.76	32.22	27.21	37.7	30.98

SEWERS.

The past year shows a very large increase in the number of sewers constructed over previous years. During the year a total of 60,315 lineal feet of sewers of various kinds were built, or equal to a mileage of 11.42. This brings the total mileage of sewers of all kinds in the City to 256.53.

In addition to the above there was also constructed by day labour 59,233 lineal feet of 6-inch drains; 4,188 lineal feet of 9-inch drains; 99 lineal feet of 12-inch drains and 33 lineal feet of 15-inch drains, from a connection with the main sewers to the property line. The cost of this work is paid for by the owners. This is an increase of 11,970 lineal feet over those constructed during the preceding year and indicates that there is still a steady increase in building operations.

Owing to the impossibility of connecting that portion of the City east of Woodbine Avenue with our present City sewers, and owing to the rapid increase in population, it was absolutely necessary that something should be done to improve the sanitary conditions in this section of the City. It was decided to construct septic tanks and bacteria beds. Under arrangements plans were prepared by the Cameron Septic Tank Company of Chicago. The contract was awarded and the work was done under the direction of this department. Work was commenced on the 1st of May and at the end of the year was practically completed, with the exception of filling the beds with filtering material, which is composed of slag procured from Hamilton.

For a description of these works see report of Assistant Engineer in charge of Sewer Department.

The Department in tendering for the various works had the lowest tender on eight sewers, affecting a total saving to the City of $2,901.11, to which should be added the extra cost of inspecting the works carried out by contract.

For further information in connection with this Department I beg to refer you to the report of the Assistant Engineer in charge of the work.

ISLAND MATTERS.

While the protection of the Island Shore is a matter that comes under the control of and has been undertaken by the Dominion Government, I wish to call the attention of your Council to the urgent necessity of further extending the present breakwater. Although the Government have driven, as a temporary expedient, a row of piles to protect the south shore and have awarded the contract for the continuation of the breakwater westwardly, no attempt has yet been made to commence the work. The present breakwater constructed many years ago is also badly in need of very extensive repairs. In fact I am of the opinion that a new concrete breakwater should be constructed from the eastern piers westwardly as far as Oriole Avenue.

West of where the new breakwater is to terminate, I think it would be advisable to construct some groynes, because wherever the

SEPTIC TANKS AND BACTERIA BEDS AT THE FOOT OF WOODBINE AVE.

breakwater terminates there will be a gradual washing away of the beach.

A great deal of work has been done by the dredges at the Island during the past year. A new channel has be encompleted up to the Sick Children's Hospital and also to the Water Works Pumping Station. This latter channel will enable this Department to bring coal to the Pumping Station at this point and thus avoid the long voyage around by the lake. A new channel has also been dredged from Oriole Avenue to Chippewa Avenue. The construction of these channels and the filling in of the marshy lands should improve the sanitary condition of the Island, and at the rate of progress now being made within the next three or four years all the low lying land at the Island should be filled in and rendered fit for building or park purposes.

REPAIRS AND MAINTENANCE OF BRIDGES, WHARVES, ETC.

The usual repairs to the bridges, wharves, etc., have been undertaken. The most extensive work undertaken was the construction of a new deck on the Gerrard Street bridge. The reconstruction of decks on these bridges is one of the greatest outlays incurred by this Department. Unfortunately a number of bridges constructed some years ago do not permit of a permanent floor.

The various life saving stations and bathing places have been attended to, and in the Report of the Assistant Engineer in charge of this work will be found a statement showing attendance at the free bathing stations during the season.

Two new public conveniences have been erected—an underground one at corner of Spadina Avenue and Queen Street, and an overhead one at the corner of Yonge Street and Cottingham Street. Photographs of these are attached to the report showing mode of construction.

For further details in connection with these matters I refer you to the Report of the Assistant Engineer in charge of bridges, etc.

ROADWAYS AND SIDEWALKS.

During the year the Department had charge of the construction of 545 separate contracts, being an increase of 79 over previous year,

and being the largest number of contracts ever undertaken by this Department.

The works were as follows,—

Carried over from 1905	40
Contract works	376
Day labor works	107
Private permanent works	62
Total works undertaken	545

The above works include the construction of 25.097 miles of pavements; 43.536 miles of concrete walks and 0.130 miles of brick walks, making a total of 43.666 miles of permanent walks laid during the year. Of the mileage of pavements constructed 81% are of a permanent character.

In the asphalt pavements constructed is included the re-surfacing of 4.142 miles of worn out pavements.

The increase in number of asphalt pavements constructed is largely owing to the low prices ruling during the past three years, and at these prices it renders this class of pavement one of the most economical and satisfactory pavements to be obtained at present.

Reference to Table No 2 shows that there is an increase in the mileage of pavements constructed as compared with 1905 of 42% and an increase in the construction of sidewalks of 16%.

The system of the City Engineer tendering in competition with contractors was continued during the past year with satisfactory results.

We intend during the coming year to make a special effort to increase the mileage of sidewalks. There are still a large number of wooden walks which are in a dangerous condition. It has been up to the present impossible to get a sufficient number of contractors, or for the Department to have a large enough staff to keep up with the required repairs.

MACADAM PAVEMENTS.

In comparing the number of works constructed during the year with the number of works constructed in 1905, a large decrease is to be noticed in macadam roads. This is a very satisfactory showing and is largely owing to the low prices of asphalt and to the fact that the citizens are in a position to pay for a permanent roadway and appreciate the benefits to be derived from its construction. There is no doubt that a good roadway in front of property increases the value of the property from twenty to twenty-five per cent.

The Department is using every legitimate means to decrease the mileage of macadam roads, especially in the business part of the City. Macadam roads are the most expensive to maintain and clean, besides being very dusty in dry weather, very dirty in wet weather, and are also very objectionable on account of contributing such a large quantity of dust and dirt to other streets which they intersect.

During the year there were only 1.591 miles of macadam constructed as compared with 3.373 miles laid in 1905, showing a decrease of more than 50 per cent. I think it is gratifying to be able to note this pronounced decrease in the construction of macadam roads.

One of the objections of this Department to this class of road, in addition to the cost of maintaining is the difficulty in procuring a suitable class of stone at a reasonable cost.

ASPHALT PAVEMENTS.

Asphalt pavements now constitute nearly 23 per cent. of the total length of paved and unpaved streets in the City.

The average price of heavy asphalt during the past year was $1.91, and light asphalt $1.42. This is a decrease of six per cent in the price of asphalt as compared with the prices prevailing in 1905.

BRICK PAVEMENTS.

During the year this Department only constructed about 1½ miles of brick pavements, but for track allowance reconstruction the amount aggregated 2¼ miles.

It is to be regretted that more miles of this class of pavement are not being laid, but it is very unpopular on account of the noise, and the price of course exceeds that of asphalt.

TAR MACADAM PAVEMENTS.

During the year there were only two tar macadam pavements laid, amounting to about one-quarter of a mile.

Pavements constructed in previous years of this class of material have not been at all satisfactory, and as the cost is almost as much as asphalt we have decided to abandon the construction of this pavement for the present.

CEDAR BLOCK PAVEMENTS.

During the year only 1.4 miles of this pavement were constructed.

BITHULITHIC PAVEMENTS.

The first bitulithic pavement laid in Toronto was commenced in November, 1903, but was not completed until the following spring. This was only a small section and was laid by the Warren Bituminous Paving Company as a sample.

In 1904 we laid about one and a half miles, and we have at present laid in the City about six miles. The price is $2.25 per square yard, with ten years' guarantee. The pavement has proved very satisfactory.

The Department have up to the present time refused to recommend this class of pavement on the initiative, upon the ground that it was patented and practically a monopoly. All the streets where this pavement has been laid have been done by petition from the property owners.

This pavement as originally laid consisted of a base of broken stone covered with a wearing surface of two inches and then treated with a mixture which is patented. Recently several pavements have been laid on four inches of concrete foundation.

One of the advantages of bitulithic over asphalt is that it affords a better foot-hold for horses and is not as dusty nor as noisy as asphalt.

ROSEHILL RESERVOIR

The following are the average prices paid for the different classes of pavements laid during the year:—

Asphalt (heavy)	$1.91	per square yard.
Asphalt (light)	1.42	"
Brick on Concrete	2.20	"
Brick Blocks on Concrete	2.52	"
Cedar Block	85	"
Macadam	.85	"
Tar Macadam	1.50	"
Bitulithic	2.25	"

In connection with the construction of and repairs to our roads, there is a much higher standard of quality demanded. This is chiefly owing to the use of self-propelled vehicles, and there is no doubt that demands for first-class pavements will increase. Any irregularities in the surface of pavements, which a short time ago would not have been noticed, are now, owing to the increased use of automobiles, not excepted, and constant complaints are being made to the Department in connection with this matter, and in future there is no doubt that municipalities will be put to a very largely increased expenditure in the cost of constructing and maintaining roads, especially in cities.

In view of this fact it might be worth while considering the advisability of putting a special tax upon the users of automobiles, because there is no question but that these demands have arisen through them, and it seems unfair that the ratepayers, who do not use the streets to the same extent, should be subjected to the increased taxation on account of these demands.

CONCRETE SIDEWALKS.

During the year 421 concrete sidewalks were constructed. The total mileage laid was 43.536 miles. This is an increase of 6.036 miles or 16 per cent. over previous year.

Only one short brick sidewalk was constructed.

The total length of permanent sidewalks laid in the City is 230.872. The total mileage of unpaved streets is 80.17, and the total mileage of paved streets is 197.24.

The Assistant Engineer's Report gives a large number of interesting details in connection with this work, and I refer you to that report.

WATER WORKS.

FINANCIAL.

The total expenditure for the year of the portion of the Water Works Department which is under the control of the City Engineer, amounted to $586,859.51, divided as follows:

Maintenance	$186,493 05
Construction	62,944 43
Renewals	9,607 35
Special works	265,932 83
Revenue mains	31,051 69
Personal and departmental accounts	20,117 51
New meters	10,712 65

The expenditure of the Revenue and Collection Branch, under the control of the City Treasurer, amounted to $31,915.33.

DISTRIBUTION.

The total length of mains laid during the year is 37,421 feet, divided as follows:

3,221	feet of	12-inch	cast iron	main.
33,056½	"	6	"	"
1,143½	"	4	"	"
37,421				

Of the above 33,000 ft. were six-inch, the balance being 12-inch and 4-inch mains. The total length of mains now in use is 293.552 miles.

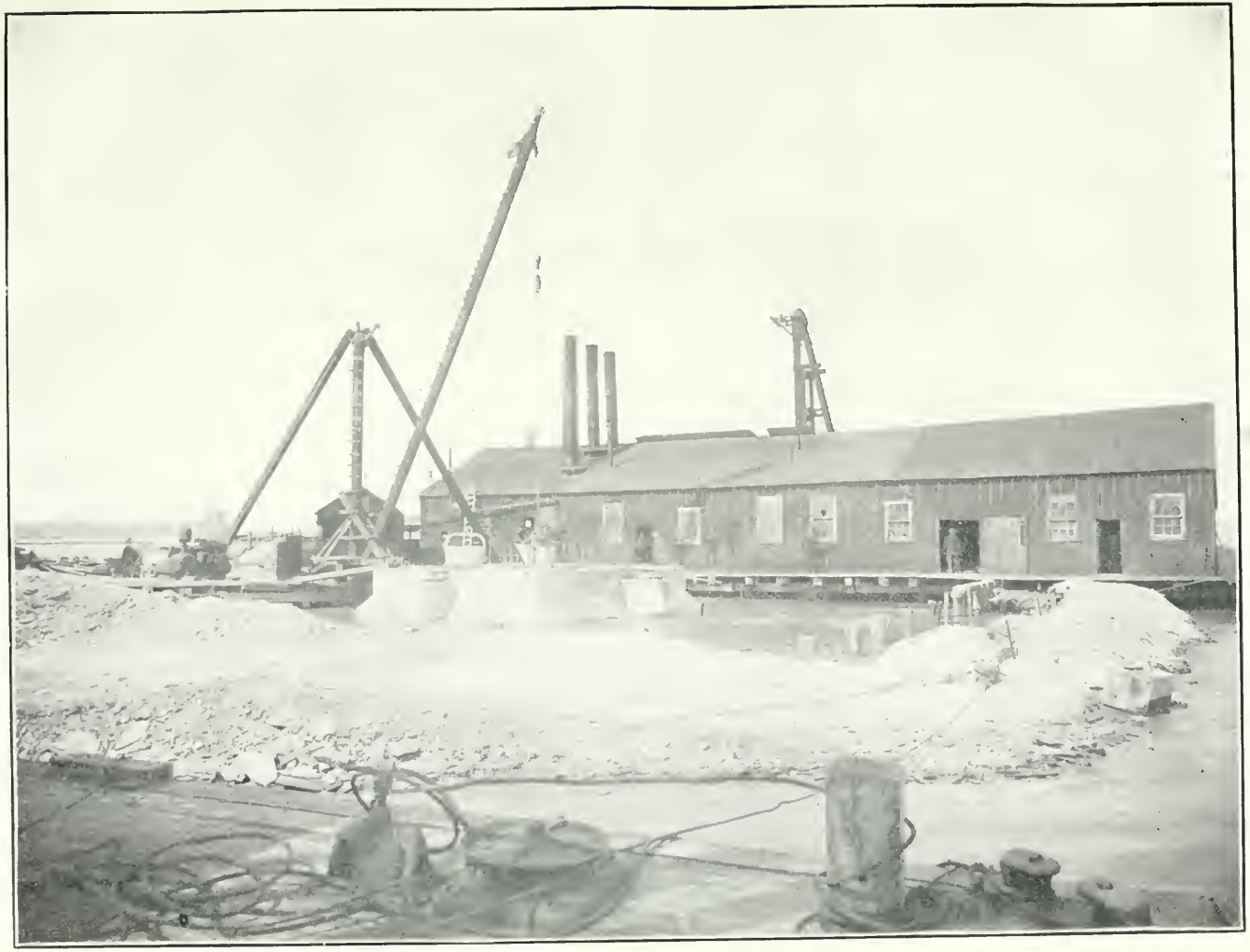
HOUSE SERVICES.

The number of House Services laid this year was 4,041, an increase of 26 per cent. over the number laid in 1905.

RESERVOIR.

The average depth of water in the Reservoir was 15 feet 3 inches, equal to an elevation of 211 feet 3 inches above zero level of the lake.

The Reservoir could not be cleaned this year owing to the difficulty in keeping up the water supply and pressure in the mains.



SOUTH TUNNEL SHAFT

HIGH LEVEL PUMPING STATION.

The daily average of water pumped at this station was 4,553,105 gallons.

The new engine house to contain the 6-million gallon triple expansion pumping engine is now completed.

ISLAND PUMPING STATION.

This station commenced pumping on the 28th of April and continued to work until the end of November.

An additional boiler contracted for last year has been installed, and the great increase in consumption necessitates the installation of an additional pump which should be of at least 1,000,000 gallons capacity.

MAIN PUMPING STATION.

The average daily pumpage was 27,012,291 gallons. Last year the daily average was 25,136,253 gallons, showing an increase of 20½ per cent.

In 1905 the consumption of coal was 17,256 tons, 95 lbs. For 1906 the consumption was 13,828 tons, 1,495 lbs., a saving of 3,427 tons, 500 lbs. This was due to the installation of the new 15-million gallon triple expansion engine.

In addition some 684,753,954 more gallons of water were pumped.

HIGH PRESSURE FIRE SYSTEM.

The three Atlas boilers for the High Pressure Fire System have been installed and the engine house for the steam turbines and pump for the same system has been erected. The contracts have also been awarded for the pipe hydrants, valves, etc.

SIX-FOOT CONDUIT.

The 6-foot pipe from the shore crib to the tunnel shaft has been completed.

WATER WORKS TUNNEL.

Progress on this work has been very slow. The contractor experienced considerable difficulty in sinking the steel caisson down into the rock. This was not accomplished until the end of the year.

The contractor has built a boring machine, which he proposes to use in boring out the shale and he expects to have it working early in the coming year.

TEMPERATURE OF WATER.

The average temperature for the year, taken at the City Hall tap, was 48.62 degrees Fahr.

The highest temperature was 71 degrees Fahr. on the 25th of August, and the lowest 36 degrees Fahr. on the 7th of February and the 2nd, 15th, 17th, 20th and 21st March.

ELECTROLYSIS OF WATER MAINS.

Owing to the serious damage to the water mains and services, it was decided to have a survey made of the same, and Mr. Knudson, the electrolysis expert, of New York, was engaged to make the necessary examinations.

The result of these examinations has been to show that quite a number of mains have been damaged by the electric current. The matter is now in the hands of the City Solicitor to take action.

Mr. Knudson's report has been printed and copies can be obtained at this office.

CITY DREDGES.

Two City Dredges, Numbers 1 and 2, have been engaged during the year at the Island and in Ashbridge's Bay improving the channels and filling in low lands.

City Dredge No. 2 was constructed by the Polson Iron Works Company, Limited, during the year, and has a fifteen inch suction and discharge pump. It went into commission on the 16th of August and has done very good service during the year.

For complete details regarding Water Works matters, reference should be had to the report of the Deputy City Engineer.

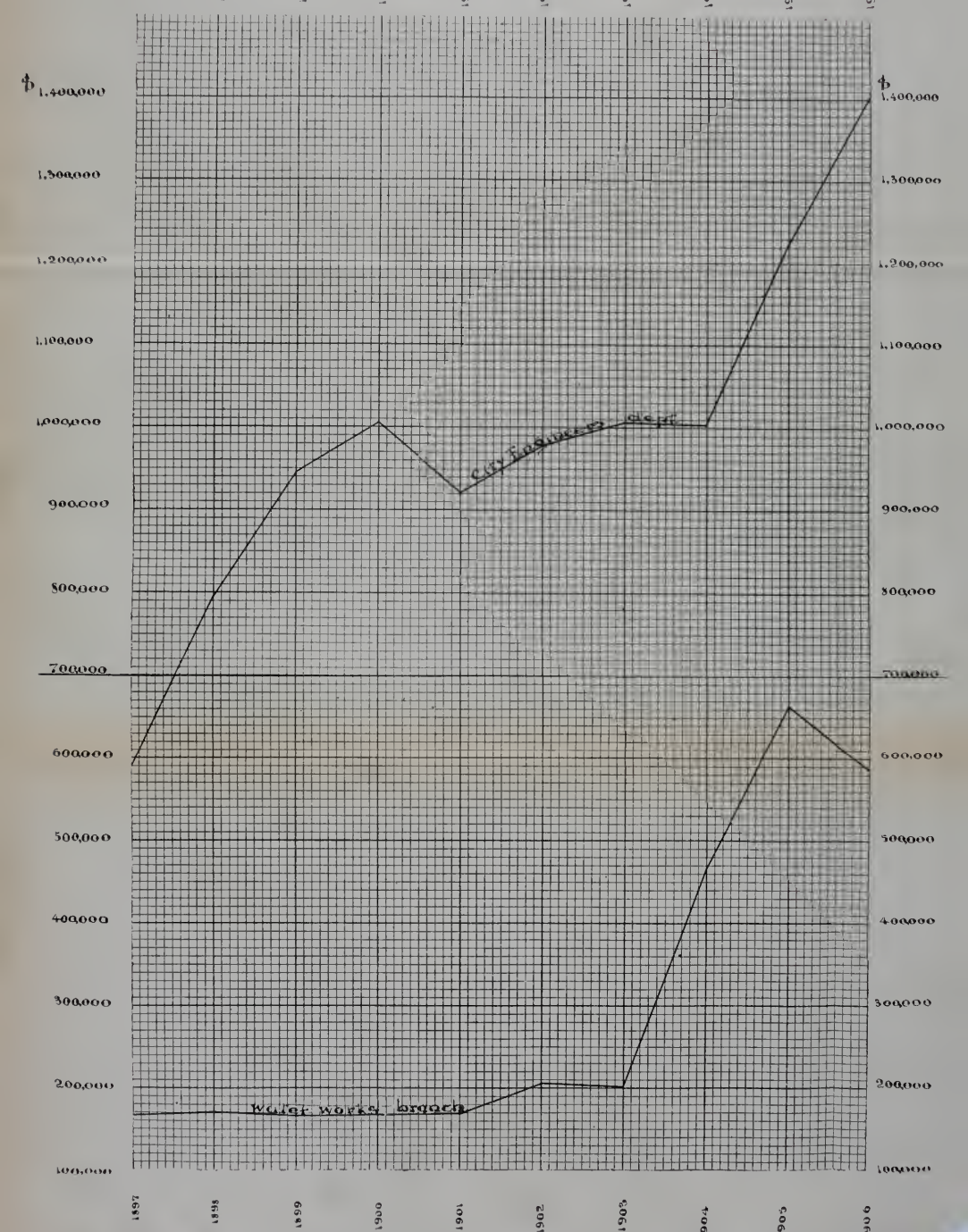
Respectfully submitted,

C. H. RUST,

City Engineer, and Chief Engineer and Manager of the Water Works.

Diagram showing expenditure of
City Engineer's dep't and water-works branch of dept
1897 to 1906.

City Engineer's Office, Toronto 27/6/07



REPORT OF ASSISTANT ENGINEER IN CHARGE OF WATER WORKS

CITY ENGINEER'S DEPARTMENT,
Toronto, December 31st, 1906.

MR. C. H. RUST,
City Engineer.

DEAR SIR,—I herewith submit the Annual Report of this Department for the year ending December 31st, 1906.

DISTRIBUTION.

37,421 feet of mains have been laid during this year, consisting of:

3,221	feet of	12-inch cast iron main.
33,056½	"	6-inch "
1,143½	"	4-inch "
37,421		

At the end of the year the total length of mains in use was 293.552 miles.

STOP VALVES.

The number of valves placed in position is as follows:

1	20-inch stop valve.
4	12-inch "
64	6-inch "
2	4-inch "

There were taken out during the year one 20-inch and two 6-inch stop valves, making a total in use of 2,654 stop valves.

There were no additional check valves placed during the year, the total number in use being 71.

HYDRANTS.

Fire hydrants to the number of ninety-four have been placed on the streets during the year, consisting of twenty-nine 3-way and sixty-five 2-way hydrants.

In addition seven 2-way hydrants have been replaced by 3-way hydrants.

Two 3-way hydrants were placed at the Grand Stand in the Exhibition Grounds and one 3-way hydrant and two 2-way hydrants have been placed on other than City streets.

One 4-way hydrant, one 3-way hydrant and nine 2-way hydrants were removed from off the streets, leaving a total of 3,423 hydrants in use.

HOUSE SERVICES.

The total number of services laid this year was 4,041, an increase of 26 per cent. over the number laid last year.

LEAKS ON MAINS.

The following leaks on mains were repaired during the year:

7	on 36-inch	main.
5	" 30-inch	"
12	" 24-inch	"
2	" 20-inch	"
..	" 16-inch	"
72	" 12-inch	"
3	" 10-inch	"
..	" 8-inch	"
126	" 6-inch	"
6	" 4-inch	"
..	" 3-inch	"
233	of all sizes.	

The cost of repairs, exclusive of repairs to asphalt pavements, was $2,032.69, including material used, or an average cost of $8.72 per leak.

The average number of leaks per mile of distribution is 0.78 and the average cost per mile $6.92.

STORE HOUSE.

The stock on hand has been checked and found correct.

STABLES.

The cost of running this branch for the year was $6,680.15. This includes feed, veterinary surgeon, repairs to waggons, harness, etc.

METER AND MACHINE SHOPS.

General repairs have been made for the following Departments:

City Treasurer, Engineer, Tug "National," Fountains, House Services, High Pressure System, Main, High Level and Island Pumping Stations, Gasoline Launch, Gerrard Street Bridge, Island Fire Protection, Island Electric Light Plant, Island Water Works, King Street Subway Fence, Nos. 1 and 2 Sand Pumps, Parks and Gardens Roadway and Sewer Departments, Reservoir, 6-ft. Steel Conduit.

The total number of meters in use up to December 31st, 1906	2,513
Meters rebuilt in shop	270
" inspected and repaired without removal	1,180
" taken off for repairs and replaced	400
New meter takers	322
Meters ordered off	57
New boxes put in	172
Total value of meters in service	$128,309

HYDRANT AND VALVE DEPARTMENT.

The following work has been done by this Department:

Hydrants inspected	17,380
" repaired on street	251
" pumped, packed and oiled	2,028
" thawed with steam and pumped	143
" blown out and pumped	23
" tightened with bar and chain	17
" taken up and set	34
" rebuilt in shop	100
" jackets drove	335
" " cut	26
" nozzles caulked	224
" chain rings closed	269
Mains blown out	548

MATERIAL USED IN REPAIRING HYDRANTS.

Leather joint rings	109
" valves	134
Cap leathers	318
Chain rings	80
Screws	6
Caps	26
Brass nuts	24
Sludge valves	84
Nozzles	183
Seats	1
Packing rings	3
Extension pieces	31
New jackets	5
Short jackets	26

VALVES REPAIRED ON STREET.

3-inch	4-inch	6-inch	10-inch
1	1	57	1

VALVES TESTED IN SHOP.

½-inch	¾-inch	1-inch	2-inch	3-inch	4-inch	6 inch	8-inch	12-inch	Tl.
11	12	28	203	23	18	90	1	21	407

BRASS WORK TESTED.

Screwed Nipples.

½-inch	⅝-inch	¾-inch	1-inch
1,454	281	280	154

Double Cocks.

⅝-inch x ½-inch x ½-inch	¾-inch x ⅝-inch x ⅝-inch
901	322

Driving Nipples.

⅜-inch	½-inch	⅝-inch	¾-inch
98	709	1,178	656

Single Cocks.

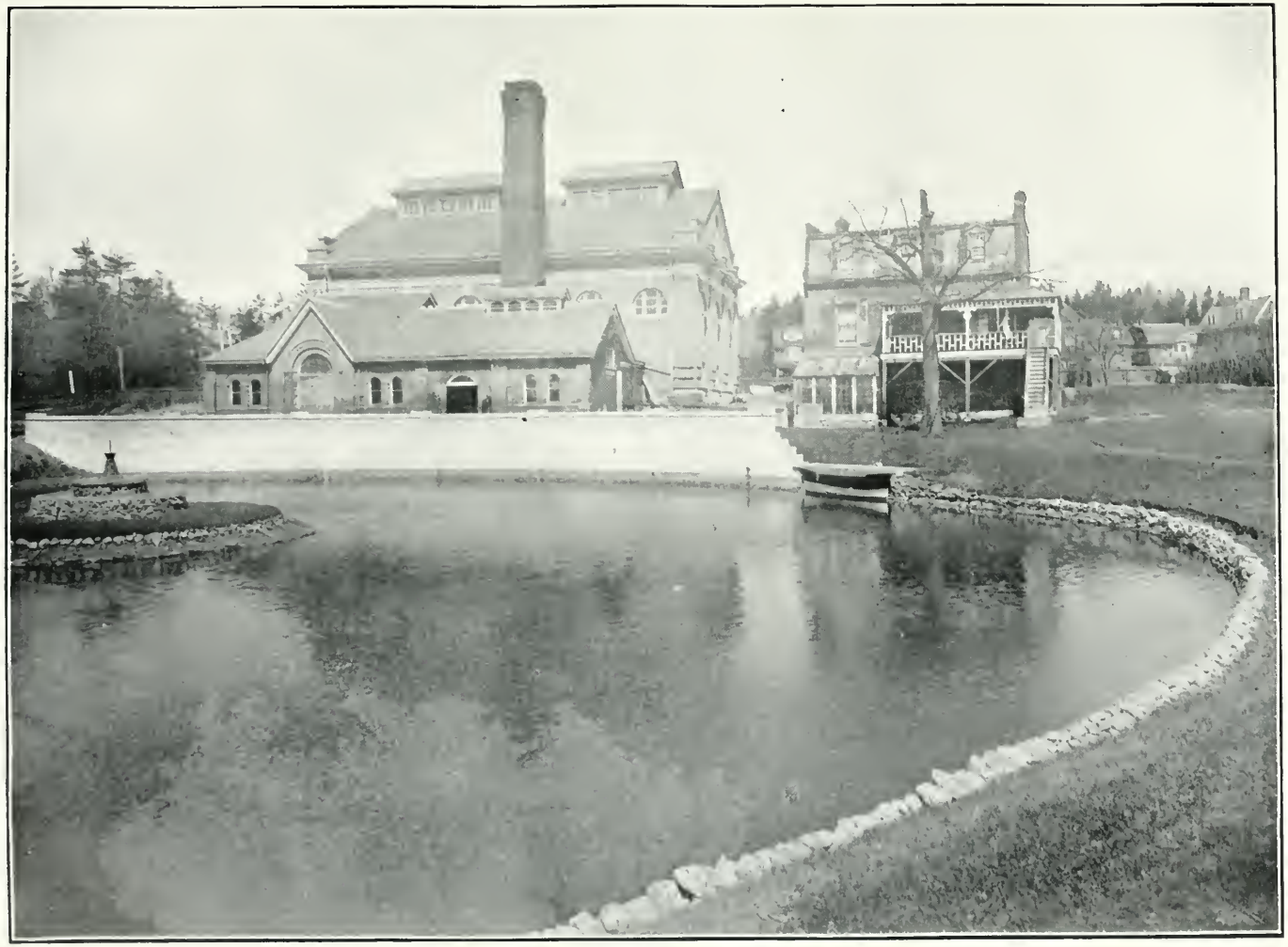
⅜-inch	½-inch	⅝-inch	¾-inch	1-inch
519	2,813	538	395	232

Couplings.

⅜-inch	½-inch	⅝-inch	¾-inch	1-inch
174	2,371	492	301	115

Total number of brass pieces tested 13,983

NEW HIGH LEVEL PUMPING STATION



HIGH LEVEL PUMPING STATION

HYDRANTS TAKEN OUT AND REPLACED.

2 ways with 2 ways.	2 ways with 3 ways.
86	7
3 ways with 2 ways.	3 ways with 3 ways.
7	5
4 ways with 4 ways.	Hydrants taken out.
1	5

New hydrants placed, 91.

2 way.	3 way.
57	34

BLACKSMITH SHOP.

New tunneling bars	40
" rings for pounders	48
" chisels	98
" steel bolts	80
" hangers	12
" iron pins	125
" cap rings	100
" bursting wedges	30
" spikes	80
" large chiseling bars	4
" grappling irons	3
" large turn buckle and stay rod	1
" stop cock rods	4,735
Boiler tools repaired	406
Chisels repaired	39

RESERVOIR.

The average depth of water in the Reservoir for the year was 15 ft. 3 inches, equal to an elevation of 211 ft. 3 inches above zero level of Lake Ontario and containing 21,188,782 Imperial Gallons.

The lowest elevation of water was 199 ft. 2 inches above zero in November and the highest 215 ft. 7 inches in December.

The Reservoir could not be spared for cleaning again this year owing to the difficulty of keeping up the supply of water and pressure in the mains.

HIGH LEVEL PUMPING STATION.

1,661,883,351 gallons of water were repumped during the year, the daily average being 4,553,105 gallons.

The coal consumed amounted to 1,578 tons and 1,692 lbs. The cost of running the Station, including repairs and some minor improvements in the grounds, was $14,230.37.

The New Engine House to contain the 6-million gallon triple expansion pumping engine has been completed and is now ready to receive the engine.

ISLAND PUMPING STATION.

The pumping engine at this station was started on the 28th of April and continued at work till the 10th of November.

The coal used amounted to 148 tons and 1,730 lbs. The cost of maintenance, services, mains, hydrants and repairs was $3,958.55.

The reserve boiler contracted for last year has been installed.

The large increase in consumption necessitates the installation of additional pumping plant which should be of 1,000,000 gallons capacity.

METERS INSPECTED AND REPAIRED WITHOUT REMOVAL TO DECEMBER 31ST, 1906.

⅝-inch	¾-inch	1-inch	1½-inch	2-inch	3-inch	4-inch	5-inch	6-inch	8-inch	10-inch	Tl.
295	199	240	18	187	94	58	2	85	..	2	1180

METERS TAKEN OFF FOR REPAIRS AND REPLACED TO DECEMBER 31ST, 1906.

⅝-inch	¾-inch	1-inch	1½-inch	2-inch	3-inch	4-inch	5-inch	6-inch	8-inch	10-inch	Tl.
159	121	53	1	41	11	9	2	2	1	..	400

NEW METER TAKERS TO DECEMBER 31ST, 1906.

⅝-inch	¾-inch	1-inch	1½-inch	2-inch	3-inch	4-inch	5-inch	6-inch	8-inch	10-inch	Tl.
123	75	53	1	44	10	12	..	4	..	..	322

METERS ORDERED OFF TO DECEMBER 31ST, 1906.

⅝ inch	¾-inch	1-inch	1½-inch	2-inch	3-inch	4-inch	5-inch	6 inch	8-inch	10-inch	Tl.
31	9	7	1	7	1	1	..	..	..	..	57

New boxes put in, 172.

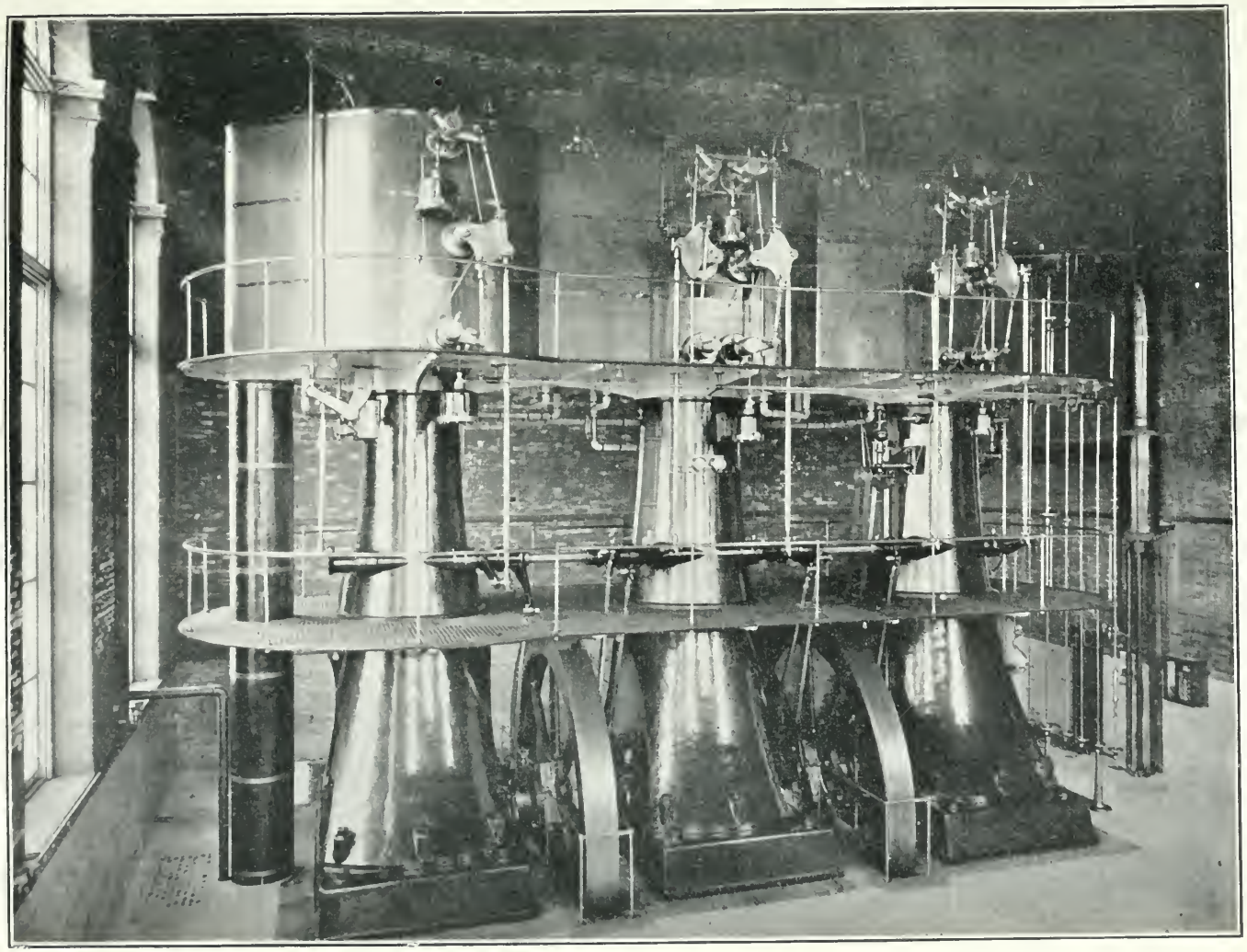
MAIN PUMPING STATION.

9,859,486,415 gallons of water were pumped during the year; of this quantity:

Engines Nos. 1 and 2 pumped	...	354,260,727
" 4 and 5 "	...	4,922,945,568
" 6 "	...	4,582,280,120

For the year the average daily pumpage was 27,012,291 gallons
Last year the daily average was ... 25,136,253 gallons

Showing an increase of ... 1,876,038 gallons per day over 1905, equal to 20½ per cent.



NEW 15,000,000 GAL. PUMPING ENGINE

During the year 1905 the total coal used was..	17,256 tons,	95 lbs.
And for 1906.....	13,828 tons	1,495 "
A saving of	3,427 tons,	500 lbs.

Due to the installation of the 15-million triple expansion engine, in addition some 684,753,954 more gallons of water were pumped in 1906 than in 1905.

The cost of operating the Station for the year was:

Coal, including cartage of same and ashes	$39,723 57
Wages, oil, waste, repairs.....	53,218 59
	$92,942 16

The three Atlas boilers for the High Pressure Fire Service have been installed and the Engine House for the steam turbines and pump for the same system erected.

SIX-FOOT CONDUIT.

(From Shore Crib to Tunnel Shaft).

The contract for this work has been completed.

TUNNEL.

Progress on this work has been extremely slow, the contractor experiencing difficulty in sinking the steel caisson down to and into the rock. It was not till about the end of the year that this was accomplished. He is now ready for the boring machine and expects to get it working early in the coming year.

TEMPERATURE OF WATER.

The average temperature for the year, taken at the City Hall tap, was 48.62 degrees Fahr.

The highest temperature, 71 degrees Fahr., on the 25th August, and the lowest, 36 degrees Fahr., on the 17th February and the 2nd, 15th, 17th, 20th and 21st March.

ELECTROLYSIS OF WATER MAINS.

Owing to the serious damage to the water mains and services, the Council decided to have a survey made of same by Mr. Knudson,

of New York, to determine what damage has been done to the water pipes through the escape of electric current from the railways and other companies using electricity, the result of which has been to show that quite a number of mains have been damaged by the electric current, and the matter is now in the hands of the City Solicitor to take action on the matter.

HYDRAULIC DREDGES.

City Dredge No. 1, the "Daniel Lamb," started work on April 4th filling in low places at Ward's Island, and continued working there till the 16th of May, when it was moved to Hanlan's and engaged in deepening channel to Hospital to enable ferries to run to that point. On June 4th the dredge was moved to Long Pond, where it worked till the 9th of June, after which it was taken to Keating's Channel to clear out deposits caused by Don freshets; working there till July 10th, when it was taken to Shields' Cut and engaged deepening entrance to Ashbridge's Bay till August 1st, when it was towed to Long Pond and continued the work of widening and deepening same near boathouse, and afterwards working over to and along 5-foot pipe till the 27th September, when it was moved to Oriole Avenue and worked there till the end of the season.

CITY DREDGE No. 2.

This Dredge, which was built by the Polson Company, has a 15-inch pump suction and discharge. It went into commission on the 16th of August and started work on the Island, making and deepening the channel to the Island Pumping Station, the material being utilized in filling in the swamp and low ground lying south of the Light House property, between the Sick Children's Hospital and the Pumping Station. The area reclaimed being approximately twelve acres.

Respectfully submitted,

C. L. FELLOWES,
Deputy City Engineer.

SCHEDULES

WATER WORKS DEPARTMENT

NOTE.—For Schedule of "Cash Expenditure on Maintenance Account," etc., see page 176.
For "Analysis of Expenditure at Main Pumping Station," see page 178.

SCHEDULE No. 1.

STATEMENT OF WATER PUMPED BY ENGINES NOS. 1 AND 2 FOR THE YEAR 1906.

Month.	No. of Days on which Engines were Working.		Number of Hours Working Each Month.		Number of Strokes for Each Engine per Month.		Quantity of Water Pumped per Month by Each Engine in Imp. Gals. Gross.		Total Quantity Pumped in Imp. Gals. Gross	Percentage in Slip.	Total Quantity Pumped in Imp. Gals. Net.	Average Pressure on Pumps	Average Level of Water in Well Below Zero.		Total Quantity of Coal Consumed per Month by Engines. Nos. 1 and 2.	
	No. 1.	No. 2.	No. 1.	No. 2.	No. 1.	No. 2.	No. 1.	No. 2.								
			h. m	h. m.								Lbs.	Ft.	In.	Tons.	Lbs.
January	10	2	214 45	14 55	145,316	7,697	33,132,048	3,532,923	36,664,971	4	35,198,372	89.8	18	7	185	480
February	18		177 40		111,199		25,353,372		25,353,372	4	24,339,238	88.7	21	0	106	520
March	20	13	294 25	247 25	200,323	143,682	45 673,644	65,950,038	111,623,682	4	107,158,735	92.2	20	2	421	940
April	11	11	154 05	154 45	109,534	88,885	24,973,752	40,798,215	65,771,967	4	63,141,089	92.1	19	11	250	1,505
May										4						
June										4						
July										4						
August		2		28 40		18,201		8,354,259	8,354,259	4	8,020,089	88.0	19	7	26	1,630
September																
October		4		70 30		44,665		20,501,235	20,501,235	4	19,681,186	91.5	19	9	70	1,620
November	7	5	150 40	84 15	112,467	53,366	25,642,476	24,494,994	50,137,470	4	48,131,971	86.5	20	2	177	890
December	13		291 30		221,994		50,614,632		50,614,632	4	48,590,047	92.7	20	5	179	320
Totals	79	37	1,283 05	600 30	900,833	356,496	205,389,924	163,631,664	369,021,588	4	354,260,727	721.5	159	7	1,417	1,905
Monthly averages	13.1	6.1	213 50	100 05	150,138	59,416	34,231,654	27,271,944	46,127,698	4	44,282,590	90.1	19	7	354	488

SCHEDULE No. 2.

STATEMENT OF WATER PUMPED BY ENGINES NOS. 4 AND 5 FOR THE YEAR 1906.

Month.	No. of Days on which Engines were working.		Number of Hours working each Month.		Number of Strokes made by Engines each Month.		Quantity of Water Pump'd each Month by each Engine—Imperial Gallons, Gross.		Total Quantity Pumped by Nos. 4 & 5 Engines. Imp. Gallons Gross.	Percentage of Slip.	Total Quantity Pumped. Imp. Gallons Net.	Average Pressure on Pumps.	Average Lift by Engines.	Total Quantity of Coal used under Boilers each Month.
	No. 4.	No. 5.	No. 4.	No. 5.	No. 4.	No. 5.	No. 4.	No. 5.						
			h. m.	h. m.								Pounds.	Ft. In.	Tons. Lbs.
January	17	24	397 05	565 35	806,195	1,186,418	170,107,145	249,147,780	419,254,925	2	410,869,827	88.5	23 1	555 570
February	12	20	256 20	437 30	512,875	930,546	108,216,625	195,414,660	303,631,285	2	297,558,660	87.1	22 11	417 1,260
March	18	31	420 40	737 05	838,703	1,555,184	176,966,333	326,588,640	503,554,973	2	493,483,874	90.0	24 7	686 1,260
April	12	30	276 50	707 35	553,637	1,500,688	116,817,407	315,144,480	431,961,887	2	423,321,649	90.1	24 0	589 590
May	11	27	220 05	626 15	381,558	1,270,506	80,508,738	266,806,260	347,314,998	2	340,368,698	90.5	23 7	479 140
June	26	27	444 10	542 25	735,268	1,000,518	155,141,548	210,108,780	365,250,328	2	357,945,322	92.3	23 4	519 910
July	29	27	653 50	484 40	1,111,573	825,975	234,541,903	173,454,750	407,996,653	2	399,836,720	90.3	24 1	571 800
August	31	28	744 00	625 15	1,175,500	1,005,555	248,030,500	211,166,550	459,197,050	2	450,013,109	89.9	25 2	651 1,440
September	30	30	711 20	712 00	1,069,744	1,168,341	225,715,984	245,351,610	471,067,594	2	461,646,242	90.8	25 10	638 360
October	22	31	478 45	710 35	763,748	1,354,517	161,150,828	284,448,570	445,599,398	2	436,687,410	89.8	23 7	635 910
November	30	28	706 45	648 00	1,165,701	1,165,625	245,962,911	244,781,250	490,744,161	2	480,929,278	88.5	25 4	661 1,760
December	11	31	248 30	734 40	358,001	1,439,540	75,538,211	302,303,400	377,841,611	2	370,284,779	90.6	24 10	571 1,240
Totals	249	334	5,458 20	7,531 35	9,472,503	14,403,413	1,998,698,133	3,024,716,730	5,023,414,863	2	4,922,945,568	1,078.4	290 4	6,977 340
Monthly Averages	20.7	27.8	454 51	627 38	788,375	1,200,284	166,558,177	252,059,727	418,617,905	2	410,245,464	89.1	24 2	581 1,340

SCHEDULE No. 3.

STATEMENT OF WATER PUMPED BY ENGINE No. 6 FOR THE YEAR 1906.

Month.	No. of Days on which Engine Worked.	No. of Hours Working each Month.	Number of Strokes made by Engine each Month.	Quantity of Water Pumped each Month. Imp. Gallons Gross.	Percentage of Slip.	Quantity of Water Pumped each Month. Imp. Gallons Net.	Average Pressure on Pump.	Average Lift by Engine.	Total Quantity of Coal used under Boilers each Month.
		h. m.					Pounds.	Ft. In.	Tons. Lbs.
January	23	515 05	585,145	309,424,676	1	306,330,430	90.4	22 2	371 1,170
February	28	644 15	755,321	399,413,745	1	395,419,608	89.9	23 5	476 280
March	14	321 00	379,327	200,588,117	1	198,582,236	92.2	23 2	240 1,110
April	19	440 00	520,740	275,367,312	1	272,613,639	91.8	22 6	329 600
May	31	744 00	880,551	465,635,369	1	460,979,016	94.6	22 7	525 920
June	30	719 00	851,662	450,358,865	1	445,855,277	92.8	22 9	505 1,760
July	31	717 15	852,797	450,959,053	1	446,449,463	92.2	23 7	502 720
August	31	710 40	844,528	446,586,406	1	442,120,542	91.9	24 2	507 1,090
September	30	720 00	860,902	455,244,977	1	450,692,528	91.7	24 10	526 500
October	29	672 25	801,768	423,974,918	1	419,735,169	91.4	23 7	473 130
November	21	466 55	550,952	291,343,417	1	288,429,983	91.9	24 2	363 1,230
December	31	744 00	869,268	459,668,918	1	455,072,229	92.0	23 7	607 1,740
Totals	318	7,414 35	8,752,961	4,628,565,773	1	4,582,280,120	1,102.8	280 6	5,429 1,250
Monthly Averages	26.5	617 53	729,413	385,713,814	1	381,856,676	91.9	23 4	452 937

SCHEDULE No. 4.

RECORD OF WATER RE-PUMPED AT HIGH LEVEL STATION FOR THE YEAR 1906.

Month.	Number of Hours Engines working.		Number of Revolutions made by Pumps.		Quantity of Water Re-pumped.		Total Quantity of Water Re-pumped by both Engines in Imp Gallons Gross.	Percentage of Slip.	Total Quantity of Water Re-pumped Imp. Gallons Net.	Average Pressure on Force Mains.	Average Pressure on Suction Mains.	Total Quantity of Coal Consumed under Boilers.		Coal Consumed for Banking Fires, Raising Steam, etc.		Coal Consumed while Pumping.	
	No. 1.	No. 2.	No. 1.	No. 2.	No. 1.	No. 2.											
	h. m	h. m.								Lbs.	Lbs.	Tons.	Lbs.	Tons	Lbs.	Tons	Lbs.
January	497 30	744 00	1,626,013	1,245,150	73,983,591	56,031,750	130,015,341	1	128,715,188	50.01	21.87	127	981	11	400	116	581
February	448 00	672 00	1,506,163	1,263,809	68,530,416	56,871,405	125,401,821	1	124,147,803	50.12	20.71	124	093	9	1,600	114	493
March	497 05	743 30	1,634,818	1,268,074	74,384,219	57,063,330	131,447,549	1	130,133,074	50.52	22.35	125	1,601	11	400	114	1,201
April	484 35	716 00	1,590,391	1,246,816	72,362,790	56,106,720	128,469,510	1	127,184,815	50.72	21.95	125	1,881	10	1,700	115	181
May	499 30	743 00	1,702,168	1,347,610	77,448,644	60,642,450	138,019,094	1	136,710,184	51.60	21.44	122	1,681	10	1,700	112	981
June	484 00	716 00	1,679,457	1,361,800	76,415,293	61,281,000	137,696,293	1	136,319,330	51.43	21.59	126	329	10	1,700	115	629
July	496 00	744 00	1,694,161	1,438,551	77,084,325	64,734,795	141,819,120	1	140,400,929	51.29	21.07	129	558	10	1,700	118	858
August	496 00	744 00	1,732,263	1,593,098	78,817,966	71,689,410	150,507,376	1	149,002,303	52.01	20.78	136	1,145	11	400	125	745
September	484 45	717 00	1,716,576	1,593,447	78,104,108	71,705,115	149,809,223	1	148,311,131	58.68	20.33	135	486	10	1,700	124	786
October	501 30	757 30	1,741,018	1,598,848	79,216,319	71,948,160	151,164,479	1	149,652,835	58.36	19.84	135	1,696	10	1,700	124	996
November	473 45	709 45	1,614,809	1,558,955	73,451,059	70,152,975	143,604,034	1	142,167,994	58.22	19.29	138	526	10	1,000	127	1,526
December	501 30	730 30	1,699,835	1,628,927	77,342,492	73,301,715	150,644,207	1	149,137,765	58.46	20.60	151	715	10	1,700	140	1,015
Totals	5,864 10	8,736 15	19,937,172	17,145,085	907,141,222	771,528,825	1,678,670,047	1	1,661,883,351	641.42	251.82	1,578	1,692	129	1,700	1,448	1,992
Monthly Averages	488 40	728 01	1,661,431	1,428,757	75,595,101	64,294,068	139,889,170	1	138,490,279	53.45	20.97	131	1,141	10	1,641	120	1,491

SCHEDULE No. 5.

Comparative Statement of Coal Consumed and Water Pumped by Months for the Years 1905 and 1906.

MONTH.	1905					1906				
	Water.		Coal.			Water.		Coal.		
	Engine Nos	Quantity Pumped.	Total Quantity Pumped.	Quantity Consumed	Total Consumption.	Engine Nos	Quantity Pumped.	Total Quantity Pumped	Quantity Consumed	Total Consumption.
		Imp.Gals. Net	Imp Gals. Net.	Tons Lbs	Tons. Lbs		Imp.Gals. Net.	Imp.Gals. Net	Tons. Lbs	Tons. Lbs
January	1 and 2	161,003,255		579 1,855		1 and 2	35,198,372		185 480	
	4 and 5	616,178,159		863 1,210		4 and 5	410 869,827		555 570	
	6					6	306,330,430		871 1,170	
			777,181,414		1,443 1,045			752,398,629		1,112 220
February	1 and 2	200,749,016		761 300		1 and 2	24,330,238		106 520	
	4 and 5	562,121,963		789 1,560		4 and 5	297,558,660		417 1,260	
	6					6	395 419,608		476 280	
			762,670 979		1,553 1,860			717,317,506		1,000 060
March	1 and 2	213,352 692		792 1,950		1 and 2	107 138 735		121 940	
	4 and 5	609,825,774		882 760		4 and 5	193,483 874		686 1,260	
	6					6	198,582,236		249 1 110	
			823,178 466		1,675 710			799,221,845		1,348 1,310
April	1 and 2	141,949,121		547 1,470		1 and 2	63,141,089		230 1,500	
	4 and 5	581,037,664		874 900		4 and 5	423,321,649		589 690	
	6					6	272,613,639		326 870	
			725,986,785		1,422 370			759,076,377		1,169 605
May	1 and 2	144,302 274		539 700		1 and 2				
	4 and 5	599,067,982		863 390		4 and 5	340,368 698		179 140	
	6					6	460,979,016		595 920	
			743 370,206		1 402 1,090			801,347,714		1,001 1,060
June	1 and 2	143,772,825		557 85		1 and 2				
	4 and 5	591 425,630		820 1,900		4 and 5	357,945,322		519 010	
	6					6	445,855,277		705 1,760	
			735,198,455		1,378 730			803,800,599		1,024 1 770
July	1 and 2	157 986,506		552 900		1 and 2				
	4 and 5	609,691,727		816 1,030		4 and 5	399,836,720		571 800	
	6					6	446,149,463		502 720	
			767 678,233		1,368 1 530			846,286,184		1 078 1,520
August	1 and 2	198 882,969		744 300		1 and 2	8,020,089		26 1,630	
	4 and 5	607 801,680		852 1,210		4 and 5	450 013,109		651 1,140	
	6					6	442,120,542		507 1,090	
			806,683 749		1,596 1,510			900 153,740		1 186 160
September	1 and 2	203,405,711		730 1,710		1 and 2				
	4 and 5	599,478,053		822 1 880		4 and 5	461 646,242		638 360	
	6					6	450,692 528		526 500	
			802 883,764		1 553 1 590			922 019 956		1,164 860
October	1 and 2	172 954,295		666 1 680		1 and 2	19 681 186		70 1,620	
	4 and 5	595,620,084		824 760		4 and 5	436,687,410		685 910	
	6					6	419 735,169		473 130	
			768,575,379		1 491 750			856,422,579		1,179 660
November	1 and 2	99 971 121		468 780		1 and 2	48 181,971		177 890	
	4 and 5	456 158,396		636 670		4 and 5	480,922,278		661 1,760	
	6	180,118,858		160 1,050		6	288,429 983		363 1,230	
			736 248 375		1,265 470			817 491 232		1 202 1,880
December	1 and 2	20 412,692		162 1,750		1 and 2	48,590 047		179 320	
	4 and 5	388,508 378		559 80		1 and 5	370 284,779		571 1 240	
	6	306,156,186		381 1,810		6	455,072 229		607 1,740	
			725,076,656		1,104 440			873 947 055		1,358 1,300
Totals			9,174 732 411		17 266 090			9 859 486 415		13 824 1,495
Daily averages			25,1 6,253		47 553			27,012 291		37 1,761

SCHEDULE No. 6.

COMPARATIVE STATEMENT SHOWING NUMBER OF GALLONS PUMPED, QUANTITY AND COST OF FUEL, ETC., FROM 1876 TO 1906, INCLUSIVE.

YEAR.	Total Water Pumped — Imp. Gals.	Quantity of Fuel. Lbs.	Total Cost of Fuel.	Average Daily Quantity of Water Pumped — Imp. Gals.	Average Daily Consumption of Coal. Lbs.	Water Pumped per Pound of Fuel — Imp. Gals.
1876	1,625,139,876	6,998,282	$19,645 75	4,451,202	19,093	232.02
1877	2,633,433,932	10,407,992	25,556 29	7,214,887	28,515	253.02
1878	1,417,370,918	8,120,000	15,196 20	3,883,208	22,246	174.55
1879	1,610,404,542	10,872,211	19,313 07	4,411,245	29,787	148.09
1880	1,785,859,706	11,694,808	28,455 72	4,879,422	31,953	152.17
1881	1,910,430,419	12,391,874	31,410 04	5,234,056	33,950	154.18
1882	2,108,933,115	11,685,556	30,170 64	5,777,899	32,015	180.47
1883	2,809,965,184	17,266,679	43,529 08	7,698,511	47,306	162.74
1884	3,645,442,082	19,920,782	52,525 56	9,960,224	54,428	183.00
1885	3,537,482,598	18,644,465	46,589 27	9,691,733	54,081	189.73
1886	4,134,376,998	19,285,371	41,979 32	11,327,060	52,837	214.37
1887	4,417,938,169	23,283,900	50,051 85	12,103,940	63,791	189.74
1888	4,041,964,514	20,457,935	46,600 77	11,073,875	56,049	197.57
1889	4,148,781,634	19,231,940	44,135 10	11,366,525	52,690	215.72
1890	5,249,760,226	34,615,830	56,239 99	14,382,904	67,536	212.96
1891	6,207,656,403	29,300,240	60,012 77	17,007,275	80,291	211.86
1892	6,659,925,650	34,505,875	71,805 25	18,246,371	94,278	193.00
1893	6,646,021,488	26,013,840	64,702 86	18,208,278	71,270	255.47
1894	6,589,492,142	26,822,145	54,902 85	18,053,403	73,485	245.67*
1895	6,639,680,218	21,178,879	40,221 85	18,190,902	58,024	313.5*
1896	6,718,187,980	18,606,508	25,307 90	18,527,836	50,837	364.4
1897	6,723,757,030	20,711,250	26,880 50	18,421,253	56,743	324.64
1898	7,136,334,102	22,100,145	27,572 00	19,551,600	60,548	322.91
1899	7,824,348,217	24,682,935	26,684 57	21,436,569	67,642	316.99
1900	8,064,384,595	24,148,565	38,668 54	22,094,204	66,160	333.95
1901	8,299,298,465	26,292,640	39,402 87	22,463,831	72,034	314.89
1902	7,993,916,325	23,769,930	39,260 22	21,901,140	64,575	339.15
1903	8,735,658,003	30,260,615	54,275 93	23,933,309	82,900	288.68
1904	9,076,711,575	32,843,325	55,784 05	24,799,758	89,735	276.36
1905	9,174,732,461	34,512,095	49,644 31	25,136,253	94,553	265.84
1906	9,859,486,414	27,649,495	43,542 28	27,012,291	75,752	356.62

* A larger percentage was allowed for slip in 1894 and 1895, than in other years.

SCHEDULE No. 7.

QUANTITY OF WATER PUMPED AND QUANTITY CONSUMED DURING EACH MONTH OF 1906, WITH AMOUNT OF DAILY CONSUMPTION.

Month.	Total Quantity Pumped per Month in Imperial Gallons	Quantity Stored in Reservoir at end of each Month. Imperial Gallons	Quantity Consumed during each Month. Imperial Gallons	Average Daily Consumption of Water. Imperial Gallons	Average Monthly Consumption of Coal at Main Pumping Station	
					Tons.	Lbs.
Stored in Reservoir on 31st December, 1905	.....	21,786,475	.....	.....	.....	.....
January	752,398,629	18,834,088	755,351,016	24,366,161	1,112	220
February	717,317,506	14,829,506	721,322,088	25,761,503	1,000	060
March	799,224,845	26,043,256	788,011,095	25,419,712	1,348	1,310
April	759,076,377	22,384,168	762,735,465	25,424,515	1,169	695
May	801,347,714	25,014,627	798,717,255	25,765,072	1,004	1,060
June	803,800,599	22,384,168	806,431,058	26,881,035	1,024	1,770
July	846,286,183	23,591,690	845,078,661	27,260,602	1,073	1,520
August	900,153,740	14,829,506	908,915,924	29,319,868	1,186	160
September	932,019,956	24,201,520	922,627,942	30,754,264	1,164	860
October	856,422,579	20,395,868	860,228,231	27,749,298	1,179	660
November	817,491,232	10,395,470	827,491,630	27,583,054	1,202	1,880
December	873,947,055	26,665,331	857,677,196	27,667,006	1,358	1,300
Totals	9,859,486,415	.....	9,854,587,561	323,952,090	13,824	1,495
Averages	821,623,868	.....	821,215,630	26,996,007	1,152	124

SCHEDULE No. 8.

COMPARATIVE STATEMENT SHOWING INCREASE OF DEPARTMENT YEARLY, 1875 TO 1906, INCLUSIVE.

YEAR.	Average Daily Consumption of Water.	Population.	Average Daily Consumption of Water per Capita for all Purposes.	Total Number of House Services in use in each year.	Number of House Services put in each year.	Total Number of Hoists in use in each year.	Total Number of Meters in use each year.	Total Number of Miles of Mains in use each year.	Average Pressure on Pumps.					
									No. 1, Worthington Engine.	No. 2, Worthington Engine.	No. 3, Inglis & Hunter.	No. 4, Blake Engine.	No. 5, Blake Engine.	No. 6, Jno. Inglis Co. Engine.
			Gallons.					Miles.						
1875 ..	3,424,000	68,678	49.86	2,769	842	.....	.....	49.810	88.10	.....	.....	.....	.....	.....
1876 ..	4,451,202	71,693	62.09	3,512	740	.....	.....	80.250	88.78	97.51	.....	.....	.....	.....
1877 ..	2,812,000	67,386	41.74	4,518	1,006	.....	.....	107.570	83.33	97.69	.....	.....	.....	.....
1878 ..	3,883,208	70,867	54.79	6,707	2,189	28	.....	110.240	89.65	96.64	.....	.....	.....	.....
1879 ..	4,411,245	73,813	59.76	8,568	1,861	47	.....	111.290	95.28	99.04	.....	.....	.....	.....
1880 ..	4,879,422	75,110	64.96	.....	1,014	66	.....	113.312	98.22	99.52	.....	.....	.....	.....
1881 ..	5,234,056	76,934	68.03	12,236	2,654	79	.....	115.518	96.32	100.78	.....	.....	.....	.....
1882 ..	5,777,899	81,372	71.01	14,062	1,826	94	.....	116.145	94.85	101.66	.....	.....	.....	.....
1883 ..	7,698,511	91,796	83.87	16,276	1,766 448	109	.....	131.352	94.27	105.49	.....	.....	.....	.....
1884 ..	9,960,224	105,211	94.66	18,363	2,087	130	.....	138.301	99.14	107.03	.....	.....	.....	.....
1885 ..	9,706,127	111,800	86.82	20,707	2,344	140	195	143.257	98.84	106.45	103.88	.....	.....	.....
1886 ..	11,344,337	118,403	95.81	23,643	2,936	152	256	156.042	104.88	104.92	104.67	.....	.....	.....
1887 ..	12,060,616	126,169	95.59	26,893	3,315	176	332	165.894	.....	.....	.....	.....	.....	.....
1888 ..	11,069,784	166,809	66.36	29,883	3,055	174	897	182.625	93.41	92.36	94.57	.....	.....	.....
1889 ..	11,378,962	175,000	65.02	34,056	3,288	222	1,347	212.832	94.25	94.82	94.92	.....	.....	.....
1890 ..	14,434,722	185,000	78.02	36,192	2,191	229	1,479	229.257	92.83	93.55	93.58	.....	.....	.....
1891 ..	17,007,275	188,904	90.03	38,250	2,111	230	1,544	237.967	93.33	93.66	93.91	.....	.....	.....
1892 ..	18,246,371	188,904	96.59	39,401	1,200	288	1,535	242.561	.....	.....	.....	.....	.....	.....
1893 ..	18,208,278	188,904	96.38	39,927	526	300	1,600	244.964	94.18	94.18	94.18	96.37	.....	.....
1894 ..	18,056,881	188,904	95.58	40,326	399	258	1,580	245.478	94.88	94.88	94.88	95.24	95.24	.....
1895 ..	18,192,063	190,000	95.74	40,683	357	.....	1,500	.....	94.88	94.88	94.88	95.05	95.05	.....
1896 ..	18,527,836	195,987	94.53	40,951	313	230	1,553	249.627	94.5	94.5	94.5	95.4	95.4	.....
1897 ..	18,378,722	195,987	93.77	41,315	364	230	1,553	252.646	95.1	95.1	95.1	95.7	95.7	.....
1898 ..	19,576,957	200,000	97.88	41,838	523	230	1,580	255.625	95.3	95.3	95.3	95.9	95.9	.....
1899 ..	21,436,509	225,000	95.27	42,552	714	230	1,598	257.613	94.9	94.9	94.9	95.3	93.3	.....
1900 ..	22,094,204	235,000	94.01	43,242	690	230	1,700	258.774	94.0	94.0	94.0	93.5	93.5	.....
1901 ..	22,507,266	235,000	95.77	44,275	1,033	239	1,800	260.321	93.8	93.8	93.8	93.2	93.2	.....
1902 ..	21,901,140	236,000	88.57	45,607	1,319	241	1,830	264.466	94.1	94.1	94.1	92.6	92.6	.....
1903 ..	23,933,847	245,000	93.60	48,529	1,102	241	1,844	266.955	94.6	94.6	94.6	93.2	93.2	.....
1904 ..	24,803,478	250,000	99.20	50.847	2,036	245	2,043	272.853	94.3	94.3	.....	93.1	93.1	.....
1905 ..	25,044,681	270,000	92.75	54.012	3,185	250	2,331	286.619	94.9	94.9	.....	93.4	93.4	.....
1906 ..	26,996,007	295 000	91.51	58,053	4,041	256	2,513	293.552	90.1	90.1	.....	89.1	89.1	91.9

SCHEDULE No. 9.

RECORD OF GAUGING AT ROSEHILL RESERVOIR FOR EACH MONTH OF 1906.

1906. Month.	Elevation of Lowest Water Above Zero.	Elevation of Highest Water Above Zero.	Average Elevation Above Zero.	Average Depth in Reservoir.	Average Contents in Imperial Gallons.
	Ft. In.	Ft. In.	Ft. In.	Ft. In.	
January	209 3	213 11	211 10	15 10	22,583,399
February	204 9	211 3	207 10	11 10	13,337,330
March	208 10	215 2	212 11	16 11	25,217,904
April	210 11	214 11	213 2	17 2	25,835,897
May	209 ..	213 11	211 6	15 6	21,786,475
June	211 4	215 ..	213 3	17 3	26,043,256
July	209 10	214 7	211 11	15 11	22,782,630
August	207 8	214 3	210 8	14 8	19,810,200
September	207 7	213 4	210 2	14 2	18,638,865
October	203 9	213 11	210 4	14 4	19,029,311
November	199 2	214 7	210 ..	14 ..	18,248,420
December	207 7	215 7	212 2	16 2	23,388,414
Averages	.....	.....	211 3	15 3	21,391,841

NOTE.—The average depth of water in the Reservoir for the year was 15 ft. 3 in., equal to an elevation of 211 ft. 3 in. above zero.

SCHEDULE No. 10.

STATEMENT OF MAINS LAID DURING THE YEAR 1906.

Street, Avenue, Etc.	Side of Street.	Location	Length in Feet.
12-IN. SUB-MAINS:			
Exhibition Rd. .	South	Extension e. to Strachan Ave., 78¾ ft.	78¾
Sterling Rd.	E. & N ..	From 1,172 ft. n. of Dundas St. northerly 643½ ft., thence westerly 303½ ft ..	947
Symington Ave. ..	West	" Sterling Rd. to Bloor St.	921
Strachan Ave.....	East	" From Exhibition Rd. n. to Wellington St.	1,274¼
		Total	3,221
6-IN. SUB-MAINS:			
Alcorn Ave.....	North	From Avenue Rd. 286 ft. east.....	302
Barrett Ave.....	East	" Conduit St. 185 ft. south	242
Bartlett Ave.....	West.....	" 795 ft. n. of Shanley Ave., 108 ft. n.	108
Barton Ave.	North	" 116 ft. w. of Manning Ave., 72 ft. w	72
"	North	" Clinton St. to Christie St.....	297
Beatrice St.	West.....	" 930 ft. n. of College St., 96 ft. n	96
Binscarth Rd.	South	" Pelham Pl. 366½ ft. e.....	401½
Carlaw Ave	East	" 723 ft. s. of Eastern Ave., 312 ft. s..	312
Castle Frank Ave..	West,.	" 150 ft. n. of Dale Ave., 71 ft. n.	71
Chestnut Rd. Pk..	W. & N...	" Roxboro' St. 443¾ ft. n.e. to old main	465
Christie St.	West	" 158 ft. n. of Melville St., 310 ft. n...	310
Clinton St.....	West	" Yarmouth Rd. to Dupont St.	549
"	West	" 390 ft. s. of Barton Ave., 170 ft. s..	170
"	West	" 316 ft. n. of Bloor St., 85 ft. n.	85
Clinton Ave	North	" City Limits 601½ ft. e. (County)....	601½
College St	North	" Sorauren Ave. 603½ ft. w	625¼
Concord Ave.... .	East	" 779 ft. n. of Hallam St., 84 ft. n....	84
Crawford St.....	West	Extension n. to Thorne St. main.....	61½
Curzon St	West	From Myrtle Ave. 436½ ft. s.	484½
Danforth Ave	South	" 805 ft. e. of Hampton Ave to Pape A	1,657½
"	South	" Byron St. to Greenwoods Ave., 758 ft. e..	779
Dawson Ave	North ...	" 131 ft. e. of Dunedin Ave., 107 ft. e.	107
Dewson St..... ..	North	" Dovercourt Rd., 290 ft. w.....	314
Doel Ave.	North	" Leslie St., 477 ft. e.....	493
Don Esplanade. ..	West	" 470 ft. n. of Eastern Ave., 157 ft. n.	157
Dresden Ave.....	North	" 432 ft. w. of Pape Ave., 50 ft. w....	50
Dunvegan Rd.	West	" St. Clair Ave., 130 ft. n.....	148
"	West	" City Limits, 1,360 ft. n. (County) ..	1,360
Dupont St.....	North	" Christie St., 717¾ ft. w	730¾
Emerson Ave	West	" 470 ft. n. of Wallace Ave., 85 ft. n..	85
"	West	" 819 ft. n. of Bloor St., 273 ft. n....	273
Erin St	East	" Front St., 278½ ft. n	323½
Exhibition Gds. ..	.....	" 12 in. main s. on e. side of Grand Stand	256½
" ..	.....	" 12 in. main s. on w. side of Grand Stand.....	255
Fenwick Ave.....	East	" Danforth Ave., 199 ft. s.	218
Forest Hill Rd....	West	" 12 ft. n. of St. Clair Ave. to Lonsdale Ave	1,479

SCHEDULE No. 10.—*Continued.*

STATEMENT OF MAINS LAID DURING THE YEAR 1906.

Street, Avenue, Etc.	Side of Street.	Location.	Length in Feet.
Franklyn Ave ...	West	From 635 ft. s. of Royce Ave., 70 ft. s....	70
Gladstone Ave....	West	" 929 ft. s. of Bloor St., 119 ft. s.....	119
Gore Vale Ave....	West	" 854 ft. s. of Arthur St., 632¼ ft.	632¼
Guelph Ave	North	" Pape Ave., 220 ft. w.....	230
Hambly Ave.....	West	" Queen St., 200 ft. n	212
Hammersmith Av.	West	" 154 ft. n. of Queen St., 48½ ft. n....	48½
Hampton Ave	West	" 464 ft. s. of Hogarth Ave., s. to Sparkhall Ave.....	294
"	West	" 326 ft. s. of Danforth Ave., 360 ft. s.	360
Havelock St.....	West.....	" 70 ft. s. of Hepbourne St., 50 ft. s..	50
Hewitt Ave	North	" Indian Rd. 424½ ft. e	436½
High Park Ave....	North	" Roncesvalles Ave., 150 ft. e	163
Indian Rd.....	East	" 255 ft. s. of Howard Pk. Ave., 60 ft. s	60
Indian Grove	East	" Howard Park Ave., 191 ft. n.	241
Jones Ave	West.....	" 860 ft. n. of Queen St., 151 ft. n....	151
Kenilworth Ave. ..	East	" 1,190 ft. s. of Queen St., 153½ ft. s..	153½
Kippendavie Ave..	West	" 790 ft. n. of Lake Shore Rd., 48 ft. n	48
Lansdowne Pl	North	" Schofield Ave., 318½ ft. w.....	335½
Lappin Ave	North	" 400 ft. w. of Dufferin St. to Lansdowne Ave.....	1,660
Laxton Ave	South	" 342 ft. w. of Jamieson Ave., 107 ft.w	107
Lee Ave.....	West	" Queen St., 200 ft. n.	209
Liszt Ave	North	" 12 ft. w. of Poplar Plains Rd., 388 ft. w.	388
Lonsdale Ave.	North	" Oriole Rd., 188 ft. e. to City Limits	240
Lynd Ave	North	" 310 ft. w. of High Park Ave. connection s. w., 264½ feet	264½
Maple Ave.....	S. & W...	" 140 ft. e. of Powell Ave. extension, 212 ft. e. and s.....	212
Marjory St.	East	" Gerrard St., 432 ft. s	481½
Markham St. north	West.....	" 280 ft. n. of Olive Ave., 182 ft. n....	182
Myrtle Ave	North	" Jones Ave., 611 ft. e	662
Niagara St., Lane 1st e. of Tecumseth St.	East	" Niagara St. s.	112
Olive Ave	North	" Palmerston Ave. to Manning Ave ..	622½
Oriole Rd	West.....	" Heath St. to Lonsdale Ave	766
Pape Ave	West	" extension 23½ ft. n. connection to Danforth Ave. 6 inch main	23½
Pearl St.....	North	" Duncan St., 300½ ft. e	322¾
Radford Ave	North	" Alhambra Ave., 367 ft. w.....	384½
Reid Ave.	West	" Queen St., 199½ ft. n	212½
Roncesvalles Ave..	East	" 490 ft. s. of Bonstead Ave. extension s. to High Park Ave	79
Rusholme Rd	East	Extension n. 30 ft. connection to St. Anne's Rd. 6 inch main	30
Russett Ave	West	From 970 ft. n. of Bloor St., 337½ ft. n....	337½
Russell Hill Rd. ..	North	" Poplar Plains Rd., 603 ft. w	624
Schiller Ave	North	" 323 ft. w. of Poplar Plains Rd., 60 ft. w.....	60

SCHEDULE No. 10.—*Continued.*

STATEMENT OF MAINS LAID DURING THE YEAR 1906.

Street, Avenue, etc.	Side of Street	Location.	Length in Feet.
Shanley Ave.....	North.....	From Salem Ave., 158 ft. w.....	177
Shaw St.....	West.....	" 85 ft. s. of Manchester Ave., 168½ ft. s.....	168½
"	West.	" 1,010 ft. n. of Bloor St., 180 ft. n...	180
Sheridan Ave.	West.....	" 300 ft. s. of Dundas St., 36 ft. s....	36
Simpson Ave.	North.....	" 390 ft. w. of Howland Ave., 107½ ft. w. to old main	107½
Sinclair Ave.....	East	" Conduit St. s. to Chelsea Ave	659
Smith St.	South .. .	" 206 ft. e. of Poucher St. extension, e. 36 ft.	36
Sparkhall Ave .. .	North	" Hampton Ave., 101½ ft. e	149½
Springhurst Ave ..	West.....	" 470 ft. s. of King St., 84 ft. s	84
Stonehouse Cres ..	North	" Dufferin St., 115½ ft. e	135
St. Anne's Rd	South	" Rusholme Rd., 224 ft. w.	276
St. Clarens Ave ..	West.....	" 780 ft. n. of Wallace, 36 ft. n	36
" ..	West.....	" 324 ft. n. of Bloor St., 663 ft. n	663
Thorne St	North	" 125¾ ft. w. of Crawford St. to 264 ft. e. of Crawford St.....	459
Ulster St.	North	" Euclid Ave., 151½ ft. w	170½
Wallace Ave.....	North.....	" 180 ft. w. of Lansdowne Ave., 195 ft. w.	195
"	North	" Perth Ave., 256 ft. w	275
Ward Ave	West	" Wallace Ave., 222 ft. n	243
Wheeler Ave.....	West . ..	" Queen St., 199 ft. n.....	211
Winnifred Ave....	East	" Queen St. to Eastern Ave.....	1,018
Withrow Ave.	North	" 1,070 ft. e. of Broadview Ave. to Logan Ave	652
Wolfrey Ave.... .	South	" 290 ft. e. of Broadview Ave., 558½ ft. e.....	558½
Woodward Ave....	West	" Queen St. to Eastern Ave.....	650
Yarmouth Rd	North	" 328 ft. e. of Shaw St , e. to old main	306
		Total	33,056½
4-IN. SUB-MAINS:			
Belford St.... ..	East	From Smith St., 226 ft. s	240
Cowan Ave.	East	" Springhurst Ave., 134 ft. s. to railway tracks....	178
Dovercourt Park North Drive.	North	" Bartlett Ave., 192½ ft. e.....	242½
Poplar Plains Rd..	East	" MacPherson Ave., 229 ft. n	250
Withrow Ave.	North	" 360 ft. e. of Logan Ave., 233 ft. e ..	233
		Total	1,143½

SCHEDULE No. 10—*Continued.*

MAINS TAKEN UP OR ABANDONED,

Street, Avenue, Etc.	Side of Street.	Location.	Length in Feet.
6-IN. SUB.-MAINS:			
Bay St., lane 1st s of Front St.	S. & W...	From Bay St. to lane w. of, 135½ ft., thence n. and s. 160 ft. ..... (Abandoned).	295½
Symington Ave. ..	West	From Bloor St., 500 ft. s	516
		Total	811½

Mains throughout the City of all Sizes and Descriptions, including those on Streets, Government, Private or other Property, at the end of the year 1906.

Size.	Total length in feet in use at end of 1905	Put in during 1906.	Taken out during 1906.	Total length in feet in use at the end of the year 1906.
36-inch mains.....	19,725¼	... .	.....	19,725¼
30-inch "	11,242	.....	.....	11,242
24-inch "	33,909	.....	.....	33,909
20 inch "	5,076	.....	.. ....	5,076
16-inch "	5,691	... .	....	5,691
12 inch "	263,550¼	3,221	.....	266,751¼
10-inch sub-mains.....	14,195	.....	.....	14,195
8 inch "	8,628½	....	....	8,628½
6-inch "	1,078,685½	33,056½	811½	1,110,930½
4-inch "	48,813	1,143½	.....	49,956½
3-inch "	10,586	.....	.....	10,586
2 inch and 1-inch service mains..	5,943½	.....	.....	5,943½
Old 8 inch cast iron mains.....	6,085	.....	.....	6,085
Old 8 inch cement mains	1,240	.....	.....	1,240
	1,513,350	37,421	811½	1,549,959½

Total length in use at end of year 1,549,959½ feet or 293.552 miles.

SCHEDULE No. 11.

STATEMENT OF HYDRANTS PLACED IN POSITION DURING THE YEAR 1906.

Street, Avenue, etc.	Side of Street.	Location.
Alcorn Ave	North	19⅓ feet east of Avenue Rd.
Barton Ave	"	26½ feet east of Christie Street.
Binscarth Rd	South	290 feet east of Pelham Pl.
Bloor St	"	South west corner of Ossington Ave., 3 way.
Broadview Ave	West	Opposite Sparkhall Avenue., 3 way.
Carlaw Ave	East	1035 feet south of Eastern Ave., 3 way.
Chestnut Pk. Rd	West	159½ feet north of Roxborough Ave.
" "	North	406½ feet north west of Roxborough Ave.
Christie St	West	466 feet north of Melville Ave.
Clinton St	"	244 feet north of Yarmouth Rd.
"	"	10⅓ feet south of Dupont Street.
College St	South	198¼ feet west of Elizabeth Street, 3 way.
" "	North	166½ feet east of Teraulay Street, 3 way.
" "	"	71 feet west of LaPlante Ave., 3 way.
" "	"	294⅔ feet west of Soraaren Ave.
" "	"	603⅔ feet " " "
Curzon St	West	304½ feet south of Myrtle Ave.
Danforth Ave	South	13 feet west of Logan Ave., 3 way.
" "	"	9 feet east of Fenwick Ave., 3 way.
" "	"	318½ feet west of Pape Ave., 3 way.
" "	"	14½ feet east of Byron Street.
" "	"	366½ feet " "
" "	"	15½ feet west of Greenwoods Ave.
Dawson Ave	North	236 feet east of Dunedin Ave.
Dewson St	"	244 feet west of Dovercourt Rd.
Doel Ave	"	474 feet east of Leslie Street.
Dupont St	"	15 feet west of Christie Street.
" "	"	320 " " "
" "	"	625¼ " " "
Emerson Ave	West	553 feet north of Wallace Ave.
" "	"	69 " Paton Rd.
Erin St	East	278½ " Front Street, 3 way.
Forest Hill Rd	West	63½ " Heath Street.
" "	"	40 feet south of Lonsdale Ave.
Franklyn Ave	"	703 " Royce Ave.
Front St	South	8½ feet west of Erin Street, 3 way.
"	"	South-east corner of Cherry Street.
"	"	178 feet east of Parliament Street, 3 way.
Gladstone Ave	West	940½ feet south of Bloor Street, 3 way.
Gore Vale Ave	"	1154½ feet south of Arthur Street
" "	"	1458¾ " " "
Guelph Ave	North	218 feet west of Pape Avenue.
Hambly Ave	West	188 feet north of Queen Street.
Hammersmith Av.	"	196½ " " "
Hewitt Ave	North	305 feet east of Indian Rd.
High Park Ave	"	148 feet east of Roncesvalles, 3 way.
Indian Grove	East	187⅔ feet north of Howard Park Ave., 3 way.
Lansdowne Place	North	316¼ feet west of Schofield Ave., 3 way.
Lappin Ave	"	658 " Dufferin Street.
"	"	963 " " "
"	"	142 feet east of Emerson Ave.
"	"	45 " west of St. Clarens.
"	"	60 " " Emerson Ave.

SCHEDULE No. 11—*Continued.*

STATEMENT OF HYDRANTS PLACED IN POSITION DURING THE YEAR 1906.

Street, Avenue, etc.	Side of Street.	Location.
Lee Ave	West	188 feet north of Queen Street.
Liszt Ave	North	315¼ feet west of Poplar Plains Rd.
Lonsdale Pl	"	182 feet east of Oriole Rd,
Maple Ave	West	160 feet north of Dale Avenue, 3 way.
Marjory Street	East	249¾ feet south of Gerrard Street.
Myrtle Ave	North	244½ feet east of Jones Avenue, 3 way.
" "	"	548½ " " "
Niagara St., Lane 1st east Tecumseth	East	100 feet south of Tecumseth Street, 3 way.
Olive Ave	North	292 feet west of Palmerston Avenue.
Oriole Rd	West	305 feet north of Heath Street.
"	"	61¼ feet south of Lonsdale Avenue.
Pearl Street	North	136¼ feet east of Duncan Street, 3 way.
Radford Ave	"	364 feet west of Alhambra Avenue.
Reid Ave	West	197 feet north of Queen Street.
Russett Ave	"	1220 " Bloor Street.
Russill Hill Rd	North	601 feet west of Poplar Plains Rd.
Sinclair Ave	East	North-east corner of Chelsea Avenue.
Sparkhall Ave	North	98 feet east of Hampton Avenue.
Stirling Rd	East	1882 feet north of Dundas Street.
" "	North	23 feet east of Symington Avenue.
Strachan Ave	East	41 feet south of Wellington Street, 3 way.
" "	"	419¾ " " " "
" "	"	729¾ " " " "
Symington Ave	West	15½ " Bloor Street, 3 way.
" "	"	610 " " "
St. Ann's Rd	South	210 feet west of Rusholme Rd.
St. Clarens Ave	West	174½ feet south of Paton Rd.
" "	"	80¾ feet north of Paton Rd.
Thorne Street	North	179 feet east of Crawford Street.
Wallace Ave	"	254½ feet west of Perth.
Walton Street	South	18 feet east of Elizabeth Street, 3 way.
Ward Ave	West	222 feet north of Wallace Avenue.
Wheeler Ave	"	197 " " Queen Street, 3 way.
Winchester St	South	100 " east of Ontario Street, 3 way.
Winnifred Ave	East	22¼ feet south of Queen Street.
" "	"	350½ " " "
" "	"	289¼ feet north of Eastern Avenue.
Withrow Ave	North	280 feet west of Logan Avenue, 3 way.
" "	"	585 " " " "
Wolfrey Ave	South	615 feet east of Broadview Avenue.
Woodward Ave	West	315½ feet south of Queen Street.
HYDRANTS PLACED ON	PRIVATE AND	OTHER PROPERTY DURING 1906.
Austin Terrace	South	Opp. east line of Walmer Rd. (Pellatt) 3 way.
Millstone Lane	"	Near east end of Millstone Lane.
Exhibition Grnds.	East	South-east corner of Old Grand Stand, 3 way.
" "	West	South-west " " " " "
Dunvegan Ave	"	11 feet south of Lonsdale Avenue (County).
2-WAY HYDRANTS RE	MOVED FROM	OFF THE STREETS.
Bay Street	East	North-east corner of Esplanade.
Bay St. Lane	West	At north angle of Lane.
" "	"	117 feet south of turn in Lane.

SCHEDULE No. 11—*Continued.*

STATEMENT OF HYDRANTS PLACED IN POSITION DURING THE YEAR 1906.

Street, Avenue, Etc.	Side of Street.	Location.
2-WAY HYDRANTS REMOVED FROM OFF THE STREETS.		
Front St.	South	Between Trinity and Parliament Streets.
" "	North	North-east corner of Cherry Street.
Logan Ave.	West	237 feet north of Withrow Avenue.
Ossington Ave.	"	South-west corner of Bloor Street.
Strachan Ave.	East	Opp. J. Inglis Company's Factory.
University Cres.	West	Opp. Observatory.
3-WAY HYDRANTS REMOVED FROM OFF THE STREETS.		
Bay Street	East	190 feet south of Front Street.
4-WAY HYDRANTS REMOVED FROM OFF THE STREETS.		
Bay Street	West	180¼ feet south of Front Street.
3-WAY HYDRANTS REPLACING 2-WAY ALREADY IN POSITION.		
Bay Street	West	141 feet north of Lake Street.
"	"	282 " " "
Dovercourt Rd.	"	286 " College Street.
Gerrard Street	"	South west corner of Ontario Street.
Millstone Lane	North	North east " York Street.
Queen St.	"	215 feet east of Woodbine Avenue.
Teraulay St.	East	South east corner of Walton Street.
2-WAY HYDRANTS REPLACING 3 WAY ALREADY IN POSITION.		
King Street	North	North-east corner of Princess Street.

SUMMARY OF HYDRANTS—1906.

Number of hydrants of all kinds on streets at end of 1905	3,241
Number of hydrants of all kinds on private property at end of 1905	94
	3,335
There were removed from off the streets, one 4-way, one 3-way, and nine 2-way hydrants; seven 2-way hydrants were replaced by 3-way; and one 3-way hydrant was replaced by a 2-way hydrant	19
	3,316
Number of additional hydrants set on streets during 1906	94
Number of additional hydrants set on private property during 1906	5
	3,415
3-way hydrants replacing those already on streets	7
2-way hydrants replacing those already on streets	1
Total	3,423

SCHEDULE No. 12.

TOTAL LIST OF ALL VALVES PLACED IN POSITION DURING THE YEAR 1906, SHOWING THE SIZE, LOCATION, ETC.

Street, Avenue, etc.	Side of Street.	Location.
20-INCH STOP VALVE :		
High Level Pumping Station		On 20 inch suction main in new engine house.
12-INCH STOP VALVES :		
Symington Ave ...	West	North line of Sterling Rd.
Symington Ave ...	"	South " Bloor St.
Strachan Ave.....	East	North " lane to Crematory.
Strachan Ave.....	"	South " Wellington St.
6-INCH STOP VALVES :		
Alcorn Ave.....	North	East line of Avenue Rd.
Bain Ave	"	East " Carlaw Ave.
Barrett Ave	East	South " Conduit St.
Barton Ave	North	East " Christie St.
Barton Ave	"	West " Clinton St.
Beachall St.....	West	10 feet south of 1st hydrant north of Front St.
Binscarth Rd.....	South	At apex to Pelham Place.
Chestnut Park Rd.	Centre ..	North line of Roxboro St.
Clinton St	West	North " Yarmouth Rd.
College St.....	North	West " Sorauren Ave.
Crawford St.....	West	South " Thorne St.
Curzon St.....	"	South " Myrtle Ave.
Danforth Ave	South	West " Hampton Ave.
Danforth Ave.....	"	West " Pape Ave.
Danforth Ave.....	"	East " Byron Ave.
Davenport Rd ..	East	North " C. P. R. fence (Pellatt's main.)
Davenport Rd ..	North	Opp. west line of Walmer Rd. "
Dewson St.....	"	West line of Dovercourt Rd.
Doel Ave.....	"	East " Leslie St.
Dupont St	"	West " Christie St.
Dunvegan Rd	West	North " St. Clair Ave.
Erin St	East	North " Front St.
Exhibition Gro'nds		South of 12-in. main, e. side of grand staud (P.V.)
Exhibition Gro'nds		" " w. " " "
Fenwick Ave.....	East	South line of Danforth Ave.
Guelph Ave.....	North	West " Pape Ave.
Hambly Ave.....	West	North " Queen St.
Hammersmith Ave	"	" " "
Hampton Ave	"	North " Sparkhall Ave.
Hewitt Ave.....	North	East " Indian Rd.
High Park Ave....	"	East " Roncesvalles Ave.
Indian Grove.....	East	North " Howard Park Ave.
Lansdowne Pl	North	West " Schofield Ave.
Lappin Ave.....	"	East " Lansdowne Ave.
Lappin Ave.....	"	West " Emerson Ave
Lee Ave.....	West	North " Queen St.
Logan Ave.....	"	North " Withrow Ave.
Marjory St.....	East	South " Gerrard St.
Myrtle Ave.	North	East " Jones Ave.
Niagara St.....	South	176 feet east of Tecumseth St. at Eckhardt Casket Company's Lane.

SCHEDULE No. 12—*Continued.*

TOTAL LIST OF ALL VALVES PLACED IN POSITION DURING THE YEAR 1906, SHOWING THE SIZE, LOCATION, ETC.

Street, Avenue, etc.	Side of Street.	Location.
Olive Ave.	North	West line of Palmerston Ave.
Olive Ave	"	East " Manning Ave.
Oriole Rd	West	North " Heath St.
Oriole Rd	"	South " Lonsdale Ave.
Pape Ave	"	South " Danforth Ave.
Pearl St.	North	East " Duncan St.
Poplar Plains Rd	East	South " Macpherson Ave. (Pellatt's main.)
Radford Ave	North	West " Alhambra Ave.
Reid Ave.	West	North " Queen St.
River St.	East	North " Queen St.
Rusholme Rd.	"	South " St. Anne's Rd.
Russill Hill Rd	North	West " Poplar Plains Rd.
Sinclair Ave	East	South " Conduit St.
Stonehouse Cres	North	East " Dufferin St.
Strachan Ave	East	On 6-in. main to Harris Abattoir (P. V.)
Ulster St.	North	West line of Euclid Ave.
Wallace Ave	"	West " Perth Ave.
Ward Ave.	West	North " Wallace Ave.
Wheeler Ave	"	North " Queen St.
Winnifred Ave	East	South " Queen St.
Winnifred Ave	"	North " Eastern Ave.
Withrow Ave.	North	West " Logan Ave.
Woodward Ave	West	South " Queen St.
Woodward Ave	"	6 feet north of Eastern Ave.
4 INCH STOP VALVES :		
Belford St.	East	South line of Smith St.
Dovercourt Park (North Drive.)	North	East " Bartlett Ave.
VALVES TAKEN OUT DURING 1906.		
20-INCH STOP VALVES :		
High Level Pumping Station		On suction main near north east corner of boiler house, opposite residence.
6-INCH STOP VALVES :		
Symington Ave.	West	South line of Bloor St.
Beachall St.	East	North line of Front St. (abandoned, C. P. R. track laid over same.)

Summary of Valves on Streets at end of 1906.

Size and Description.	In use at end of 1905.	Put in during 1906.	Taken out or abandoned during 1906.	Total in use at end of 1906.
Stop Valves:				
36 inches	14	.....	.....	14
30 "	7	.....	.....	7
24 "	22	.....	.....	22
20 "	7	1	1	7
16 "	7	.....	.....	7
12 "	492	4	.. ..	496
10 "	6	.....	.....	6
9 "	6	.....	.....	6
8 "	14	.....	.....	14
6 "	1,893	64	2	1,955
4 "	88	2	.....	90
3 "	30	.....	.....	30
Totals	2,586	71	3	2,654
Check Valves.				
36 inches	5	.....	.....	5
30 "	4	.....	.....	4
24 "	1	.....	.....	1
20 "	1	.....	.....	1
12 "	12	.....	.....	12
6 "	48	.....	.....	48
Totals	71	.....	.....	71

SCHEDULE No. 13.

STATEMENT OF HOUSE SERVICES LAID DURING 1906.

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Avenue Rd.		20	2		1	1		
Armstrong Ave.	15	1						
Agnes	2	1		1				
Adelaide w.	3			1				1
Atkin Ave.	2							
Allen Ave.	2							
Abbott Ave.	14							
Alhambra	3							
Admiral Rd.			2					
Ashport Ave.	2							
Albany Ave.		2						
Alcorn Ave.		5						
Albert				1				1
Arthur	3							
Ann	2							
Augusta Ave.	2			1				
Bathurst	11	40	2	3	1			
Beatrice	36	38	1					
Bloor w	16	23	2	2	1			
Bloor e.							1	
Brock Ave	20							
Belmont	2							
Bellwoods Ave.	10	26						
Bolton Ave.	11							
Beatty Ave.		9	1					
Broadview Ave.	19	13	6		3			
Buller	2							
Brighton	1							
Binscarth Rd.	1		1					
Birtle Ave.	7							
Balmoral			9	2				
Beaconsfield Ave.	6	1						
Barton Ave.	13	5	1					
Bellevue Ave		1						
Brunswick Ave.	9	10	1					
Boustead Ave.	6	2						
Bartlett Ave.	29							
Bernard Ave.			1					
Borden	1							
Booth Ave.	12							
Brookfield	1							
Bay					2	1	2	1
Bedford Rd.			2	1				
Brooklyn Ave.	2	1						

STATEMENT OF HOUSE SERVICES LAID DURING 1906—*Continued.*

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Bain Ave.	9	3						
Beatrice (*Duplicate*)								
Blong Ave	6							
Berkeley	1				1			
Bulwer Ave.	2	1						
Beverley		14						
Barrett Ave.	1	3						
Belford	1							
Belfair Ave.		1						
Birch Ave.		2						
Brant	2							
Boultbee Ave.	2							
Britain	1							
Blackburn						1		
Bishop	3							
Bank	2							
College	30	20	1	2				
Conduit	11	1						
Cobourg Ave.	1							
Churchill Ave.	1	1						
Camden	4							
Concord Ave.	40	15	2					
Caroline	6							
Crawford	36	11						
Camden	4							
Concord Ave	39	15	2					
Caroline	6							
Crawford	36	11						
Chestnut Park			6	5		1		
Christie	7	1						
Clinton	41	2	2					
Coolmine Rd.		1						
Cumberland	4	1						
Callender	2	2						
Chicora Ave		2	1					
Cowan Ave.		1	1					
Carlaw Ave.	1			2				
Close Ave.		3						
Church	2	1			1			
Carlton	2	1						
Crescent Rd.			1					
Clarendon		1	1					
Carr	2							
Cherokee Ave.	1							
Cobalie		1						

STATEMENT OF HOUSE SERVICES LAID DURING 1906—*Continued.*

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Curzon	17							
Centre Ave.	1							
Charles	2	1			1	1		
Chatham					1			
Chesley Ave	1							
Collier		2						
Coxwell Ave	1							
Cottingham		9						
Clara	1							
Claremont	1							
Castle Frank			1					
Cornwall	1							
Coatsworth	1							
Caer Howell				1				
Duncan						1	1	
Dundas	24	2			1		1	
Dovercourt Rd	31	10	1					
Delaware Ave	8	7	2					
Dufferin	41	1			1			
De Grassi	6							
Dora Ave	4							
Dearbourne	1							
Dominion		1						
Davenport Rd	7							
Dewson	3	4						
Dresden Ave	4							
Dalhousie				1				
Dowling Ave		4	1		1			
Danforth Ave	13	2						
Dundonald		19	1					
Dunn Ave		11						
Duchess	1				2			
Dupont	6	10	1	2		1		
D'Arcy		1						
Duke		1		1				
Defoe	1							
Don Esplanade				1				
Defries	4							
Dagmar Ave	3							
Dunedin Ave	6							
Doel Ave	14							
D'Arcy		1						
Davies	1							
Dermott Pl	3							
Denison Ave	1	2						

STATEMENT OF HOUSE SERVICES LAID DURING 1906—*Continued.*

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Dawson Ave	3							
Dunvegan			1					
Emmerson Ave	38							
Euclid Ave	10	5						
Eastern Ave	13	1			1			
Elm	1				2			
Elizabeth	4	1		1				
Esplanade e								1
Essex	5							
Elm Ave			1	1	1			
Edwin Ave	5							
Earnbridge	4							
Elm Grove Ave	1		1					
Empress Crescent				1				
Exhibition Grounds	1		1	5				
Elmer Ave	1							
Elliott	2							
Elgin Ave				1				
Edward	2							
Englewood Ave	8							
Erin	12							
Esther				2				
Edgedale Rd					1			
Eden Place	1							
Emily					1			
First Ave	6	1		1				
Fenning	1							
Florence	5	1	1					
Front e					1	1	1	2
Front w				1	1			
Farnham Ave		2	4					
Fermanagh Ave	4	3						
Foxley	1							
Forest Hill Rd			7	2				
Franklyn Ave	6							
Funston	1							
Frankish Ave	4							
Fuller	2							
Foster Place	2							
Fraser Ave				1				
Fenwick Ave	2							
Gladstone Ave	29	3	1		1			
Gerrard e	43	2		2				
Grace	85	43	1					
Galley Ave	11	2						

STATEMENT OF HOUSE SERVICES LAID DURING 1906—*Continued.*

Name of Street	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Galt Ave	10							
Gore Vale Ave	4	5						
Givens	25							
Gibson Ave	16							
Garnet Ave,	12							
Grange Ave	2	1						
Gifford	1	1						
Greenwood Ave	4							
Glen Rd			3					
Grant	4							
George	1	1						
Grafton Ave	6	1						
Garden Ave	3	4						
Guelph Ave	2							
Gillead Place	2							
Hampton Ave	8	1						
Hepbourne	1							
Havelock	8	15	1					
Hamburg Ave	17	1	1					
Hallam Ave	28							
Howland Rd	4							
Heath Ave			1					
Huron		10	3	1			1	
Hawthorne Ave			6					
High Park Ave		4						
Hogarth Ave	4							
Herbert Ave					1			
Harcourt Ave	7							
Hamilton	17							
Hayter								1
Howland Ave	2	9						
Hazleton Ave	4							
Huxley		7						
Harbord		1						
Howard Park Pl	2	2						
Howie Ave	5							
Heward Ave	8							
Hunter	2							
Hambly Ave	3			1	1			
Hastings Ave	2							
Harrison	2							
Hammersmith Ave				1				
Hillsboro' Ave	3							
Howard		3						
Hewitt Ave	2							

STATEMENT OF HOUSE SERVICES LAID DURING 1906 *Continued.*

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Harriett	1							
Hayden				1				
Indian Rd.		2		1				
Island (Ward's)		1						
Indian Grove Ave.		2						
Isabella				1				
Jones Ave	26							
Jameson Ave.		9	1					
Jarvis			1		1			
Jerome	10				1		1	
John								1
Kenilworth Ave	6							
Kendal Ave.		6	4	1				
King e					1			
King w		5	5		1		1	1
Kippendavie Ave	5	2						
Kintyre Ave	3							
Leuty Ave	16							
Leslie	25							
Lindsay Ave	30	1						
Lee Ave	8				1	1		
Lansdowne Ave	59			1				
Lappin Ave	42							
Lippincott	2	1						
Langley Ave	16	6	1					
Lowther Ave.				1	3			
Logan Ave.	11			1				
Lake	1		1	1				
Laxton Ave			4	1				
Lake Shore Ave	4							
Lewis Ave	3							
Liszt Ave			2					
Lucas	1							
Lombard				1			4	2
Laing	4							
Lakeview Ave.		1						
Lynd Ave	19							
Lennox Ave	2	1						
Leonard Ave	1							
Madison Ave.		5	6	2	1			
Macpherson Ave	4	37						
Manning Ave.	45	2	1					
Montrose Ave.	50	14						
Margueretta	18	3						
Maple Ave.			4					

STATEMENT OF HOUSE SERVICES LAID DURING 1906—*Continued.*

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Millicent	14							
Markham	36	5	1					
Morse	2							
Melville Ave	12							
Melinda							1	
Maud Ave			1					
Moutray Ave	3							
Mohawk Ave	5							
Morley Ave	16							
Middleton	6							
Marion	4	1						
Marjory Ave	16	1						
Muir Ave	14							
Mutual		2						
Mill			1					
Maniton Rd				1				
Macdonell Ave	4	3						
Myrtle Ave	18							
Massey	1							
Marlboro' Ave		5						
Mansfield Ave	1							
Munro	3							
Mitchell Ave	1							
McMaster Ave	1	1						
McKenzie Cres		1						
McGee	1							
McMurrich	2							
Nassau	2							
North Sherbourne		1	2					
Nanton Cres			3					
Northumberland	6							
Northcote Ave		1						
Noble				1				
O'Connell	2							
Ossington Ave	29	9						
Ontario	1	1		1				
O'Hara Ave	3							
Oriole Rd			3					
Oxford		1						
Olive Ave	6							
Pearson Ave	5	7	1					
Prince Arthur Ave			2	1	2			
Parliament	1	3	2	1	2			
Palmerston Ave	22	15	29					
Peter		1						

STATEMENT OF HOUSE SERVICES LAID DURING 1906—*Continued.*

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Pape Ave	38	1			1			
Pendrith Ave	4							
Pelham Pl			1					
Pears Ave	5			1				
Perth Ave	9	3						
Parkman Ave	2							
Poplar Plains Rd	1	7	8		1			
Parkview Ave	3							
Poulette	3							
Poucher	3							
Pearl				2	1	1	1	
Price				1				
Powell				1				
Park Rd		3						
Queen e	32	10	1	1	4		2	
Queen w	6	5			3		1	
Roxboro' w		24	2					
Rusholme Rd		11	2					
Radcliffe Ave	13							
Ritchie Ave	5							
Ruskin Ave	2							
Rathnelly Ave		4						
Roxboro e		4	6	5				
Russett Ave	9	1	1					
Ryerson Ave	5	1						
Roncesvalles Ave	9	1						
Robert	1			1				
River	2	1						1
Reid Ave	8							
Royce Ave	4	1						
Russell			1					
Richmond w	1							
Richmond e					1			
Radford Ave	5	1						
Rowenwood Ave				1				
Riverdale Ave	1							
Smith	5	4						
Seaton Sq	8	1						
Sheridan Ave	3							
St. Clarens Ave	59	4	1					
Sheppard							1	
Spruce	1	1						
Shaw	58	5	1					
Saulter	3							
Symington Ave	20			1				

STATEMENT OF HOUSE SERVICES LAID DURING 1906—*Continued.*

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Salem Ave	19	5						
Sumach	14				1			
Scollard	2							1
Stanley Ave	1							
Schiller Ave			1	1	1			
Springhurst Ave		8	3					
St. Patrick		5						
Simpson Ave	13	5						
Sorauren Ave	7	1		1	1			
Summerhill Ave	5	3						
St. George			3	1	7			
St. Vincent					1			
St. Helen	4	1						
Spadin Rd		12	4					
Starr Ave	3							
Spadina Pl	1							
South Drive			4					
Simcoe				1				
Sackville	4							
Shuter					1			
St. Clair Ave	1							
Sparkhall Ave	11							
St. Andrews Ave		1						
Shaw Pl	2							
Strange Ave	1							
St. Joseph					1			
Steiner	1							
Scarth Rd			2					
Shanley Ave	4							
Spadina Ave		7			1			
Sinclair Ave	8	1						
St. Anne's Rd		9						
Sherbourne				1				
Seaforth Ave	1							
St. Albans	6			1				
Salisbury Ave	1							
Scott					1			
St. Paul	4							
Shudell Ave		1						
Sherbourne			1	1				
Seaton	2				1			
St. David	1							
Soho		1						
Strachan Ave	2							
Sylvan Ave	1							

STATEMENT OF HOUSE SERVICES LAID DURING 1906 *Continued.*

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Shaftesbury Ave		1						
Sussex Ave		1						
Sprcat	5							
Tyndall Ave				1				
Tiverton Ave	5							
Tranby Ave	2							
Terauley	3				1			
Thorn	8							
Trinity	1				1			
Thompson	2							
Trinity Sq	1							
Triller Ave	1							
Ulster		3						
University Ave	1				1			
Violet Ave	3							
Victor Ave	21	5						
Van Horne	12				1			
Vermont	10							
Vine				1				
Waverley	2				2			
Winchester	1				1			
Withrow Ave	32	2						
West Lodge Ave	4	2						
Westmoreland Ave	34	2						
Wallace Ave	24							
Woodlawn Ave		10	2	2				
Winnifred Ave	15							
Woolsley	3							
West Ave	8	1						
Wilson Ave		16	1					
Wascana Ave	15							
Walker Ave	2	5						
Wellesley		1	1	1	2			
Wards' Island		1		3				
Woolfrey Ave	26							
West Island Pt	1							
Wilton Ave	5				1			
Walmer Rd		4	4	1	3			
Wellington w								2
Wickson Ave	2							
Wheeler Ave		1						
Wright Ave	7							
Wood	3							
Woodbine Ave	3							
West Marion		1						

STATEMENT OF HOUSE SERVICES LAID DURING 1906—*Continued.*

Name of Street.	Size of Services.							
	½-in.	⅝-in.	¾-in.	1-in.	2-in.	3-in.	4-in.	6-in.
Wells		3						
Woodward Ave	14							
Ward	2							
Ward Ave	1							
Wilcox					1			
Wyndham	2							
Wyatt Ave	2							
William	9							
Windsor					1			
Walton	2							

SCHEDULE No. 14.

Statement of House Services in Use to 31st December, 1906.

Total number of services in use previons to 1874						1,375
" "	"	laid during 1874				552
Number of new	"	"	1875			842
"	renewed services laid during 1875					24
"	new	"	"	1876 by permit		141
"	renewed	"	"	1876		12
"	new	"	laid by Commission	1876		602
"	renewed	"	"	"	1876	258
"	new	"	"	"	1877	1,006
"	renewed	"	"	"	1877	161
"	new	"	"	Corporation	1878	2,189
"	renewed	"	"	"	1878	103
"	new	"	"	"	1879	1,861
"	renewed	"	"	"	1879	97
"	new	"	"	"	1880	1,014
"	renewed	"	"	"	1880	41
"	new	"	"	"	1881	2,654
"	renewed	"	"	"	1881	117
"	new	"	"	"	1882	1,826
"	renewed	"	"	"	1882	44
"	new	"	"	"	1883	1,766
"	renewed	"	"	"	1883	54
"	new	"	"	"	1884	2,087
"	renewed	"	"	"	1884	12
"	new	"	"	"	1885	2,344
"	renewed	"	"	"	1885	22
"	new	"	"	"	1886	2,936
"	renewed	"	"	"	1886	19
"	new	"	"	"	1887	3,250
"	renewed	"	"	"	1887	65
"	new	"	"	"	1888	2,990
"	renewed	"	"	"	1888	65
"	new	"	"	"	1889	3,288
"	renewed	"	"	"	1889	68
"	new	"	"	"	1890	2,136
"	renewed	"	"	"	1890	55
"	new	"	"	"	1891	2,058
"	renewed	"	"	"	1891	53
"	new	"	"	"	1892	1,151
"	renewed	"	"	"	1892	49
"	new	"	"	"	1893	526
"	renewed	"	"	"	1893	2

SCHEDULE No. 14—*Continued.*

STATEMENT OF HOUSE SERVICES IN USE TO 31ST DECEMBER, 1906.

Number of	new	services	laid by	Corporation	1894	390
"	renewed	"	"	"	1894	11
"	new	"	"	"	1895	319
"	renewed	"	"	"	1895	38
"	new	"	"	"	1896	291
"	renewed	"	"	"	1896	45
"	new	"	"	"	1897	474
"	renewed	"	"	"	1897	29
"	new	"	"	"	1898	504
"	renewed	"	"	"	1898	32
"	new	"	"	"	1899	664
"	renewed	"	"	"	1899	35
"	new	"	"	"	1900	683
"	renewed	"	"	"	1900	26
"	new	"	"	"	1901	1,133
"	renewed	"	"	"	1901	8
"	new	"	"	"	1902	1,319
"	renewed	"	"	"	1902	13
"	new	"	"	"	1903	1,402
"	renewed	"	"	"	1903	45
"	new	"	"	"	1904	2,036
"	renewed	"	"	"	1904	48
"	new	"	"	"	1905	3,185
"	renewed	"	"	"	1905	20
"	new	"	"	"	1906	4,041
"	renewed	"	"	"	1906	31
"	services	in Yorkville	at time	of annexation		448
"	"	Parkdale	"	"		885
Total number of services laid on Island						350

SCHEDULE No. 15—Number and Size of Services in Use to December 31st, 1906.

	¼-in.	⅜-in.	½-in.	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	2½-in.	3-in.	4-in.	6-in.	8-in.	Total.
Services laid previous to 1875														1,927
New services laid in 1875			617	194	38	7	4	5		1				866
" " 1876			900	80	11	8	1	4	1	8				1,013
" " 1877			1,083	43	9	8		10		14				1,167
" " 1878	86	1,427	717	28	5	9		5		14	1			2,292
" " 1879		1,248	633	47	9	5		4		12				1,958
" " 1880		607	385	26	7	3		8		19				1,055
" " 1881		1,375	1,275	62	17	17		7		17	1			2,771
" " 1882		625	1,139	44	23	20		5		14				1,870
" " 1883		373	1,311	70	16	13		17		17	3			1,820
" " 1884		441	1,519	70	13	25		9		20	2			2,099
" " 1885		190	2,068	56	26	13		7		5		1		2,366
" " 1886		14	2,741	92	37	29		9		25		8		2,955
" " 1887		10	3,062	106	55	38		15		25		4		3,315
" " 1888			2,856	101	32	22		19		14	7	4		3,055
" " 1889			3,087	127	52	45		19		1	24	1		3,356
" " 1890			1,995	83	37	35		16			24	1		2,191
" " 1891			1,995	33	34	24		11			13	1		2,111
" " 1892			1,109	26	23	23		7			12			1,200
" " 1893			465	18	13	15		8			8	1		528
" " 1894			332	29	15	17		3			4	1		401
" " 1895			270	26	25	17		11			7	1		357
" " 1896			359	20	22	20		13			1	1		336
" " 1897			390	34	17	36		16			5	5		503
" " 1898			378	60	45	27		12		1	6	7		536
" " 1899			430	123	70	23		26		1	5	11		699
" " 1900			421	137	43	53		17			6	5		682
" " 1901			654	202	92	40		24			16	5		1,033
" " 1902			1,019	128	74	45		36			15	10		1,332
" " 1903			1,101	113	83	41		37		7	12	7	1	1,402
" " 1904			1,560	231	80	48		50		12	37	15	3	2,036
" " 1905			1,722	354	138	58		29		7	20	28	1	3,185
" " 1906			2,710	899	213	95		81		9	19	15		4,041
Totals	86	6,310	40,295	3,662	1,371	879	5	540	1	243	258	122	5	56,458

Total number of services on Island	282
Laid by Yorkville previous to annexation	448
" Parkdale " "	885
Total number of services	58,073

SCHEDULE No. 16.

METERS REBUILT IN SHOP.

Month.	⅝-inch.	¾-inch.	1-inch.	1½-inch.	2-inch.	3-inch.	4-inch.	5-inch.	6-inch.	8-inch.	
Crown	95	21	7	....	6	4	3	....	....	....	136
Worthington	9	....	3	1	6	1	....	....	....	....	20
Siemens	..	13	2	....	4	1	1	1	....	1	23
Gem	...	....	....	....	11	....	....	....	1	....	12
Nash	8	8	5	....	....	....	....	....	....	....	21
Keystone	5	3	4	....	....	....	....	....	....	....	12
Hersey	5	3	....	....	....	....	....	....	....	....	8
Trident	9	18	9	....	....	....	....	....	....	....	36
Empire	1	....	....	....	....	....	....	..	....	..	1
Lambert	....	1	....	....	....	....	....	....	....	....	1
Total	132	67	30	1	27	6	4	1	1	1	270

SCHEDULE No. 17.

METERS IN USE TO DEC. 31ST, 1906.

	⅝ inch.	¾ inch.	1 inch.	1½ inch.	2 inch.	3 inch.	4 inch.	5 inch.	6 inch.	8 inch.	10 inch.	
Crown	560	250	104	....	79	58	57	....	7	....	....	1,115
Worthington	44	67	137	29	127	34	3	....	....	....	....	441
Siemens	49	63	43	1	47	26	18	12	8	4	1	272
Kennedy	....	....	....	....	4	10	6	....	16	....	....	36
Gem	....	....	....	....	71	14	9	....	4	....	1	99
Nash	44	27	33	....	2	....	....	....	....	....	....	106
Keystone	46	41	18	....	....	....	....	....	....	....	....	105
Hersey	45	25	24	....	1	....	....	....	....	....	....	95
Union	....	....	....	....	26	....	....	....	....	....	....	26
Trident	80	69	35	....	....	....	....	....	....	....	....	184
Empire	4	....	3	1	....	....	....	....	....	....	....	8
Lambert	2	1	....	....	....	....	....	....	....	....	....	3
Buffalo	....	....	1	....	....	....	....	....	....	....	....	1
Crest	....	....	....	....	....	12	10	....	....	....	....	22
Total	874	543	398	31	357	154	103	12	35	4	2	2,513

SCHEDULE No. 18.

METERS INSPECTED AND REPAIRED WITHOUT REMOVAL FROM SERVICE.

	⅝-inch.	¾-inch.	1-inch.	1½-inch.	2-inch.	3-inch.	4-inch.	5-inch.	6-inch.	
Crown	133	61	40	....	....	14	13	....	4	265
Keystone	17	10	15	....	....	....	....	....	....	42
Trident	23	16	3	....	....	....	....	....	....	42
Hersey	14	10	4	....	....	....	....	....	....	28
Worth	43	73	134	14	....	31	4	....	....	299
Siemens	1	13	7	....	1	4	7	2	7	42
Empire	1	....	....	....	....	....	....	....	....	1
Nash	11	10	18	....	....	....	....	....	....	39
Gem	....	....	....	....	1	6	1	....	3	11
Kennedy	....	....	....	....	....	27	27	....	61	115
Crest	....	....	....	....	....	4	3	....	....	7
Total	243	193	221	14	2	86	55	2	75	891

SCHEDULE No. 19.

SIZE AND NUMBER OF NEW METER TAKERS PLACED DURING 1906.

	⅝-inch.	¾-inch.	1-inch.	1½-inch.	2-inch.	3-inch.	4-inch.	6-inch.	
Crown	58	23	13	..	11	9	5	3	122
Keystone	8	9	1	....	....	....	....	....	18
Trident	19	26	15	....	....	....	....	....	60
Hersey	14	9	14	....	....	....	....	....	37
Worth	11	6	5	1	18	....	....	....	41
Siemens	....	1	1	....	1	....	....	....	3
Empire	5	....	....	....	....	....	....	....	5
Nash	8	3	3	....	....	....	....	....	14
Gem	....	....	....	....	7	....	2	1	10
Crest	....	....	....	....	....	2	5	....	7
Union	....	....	....	....	9	....	....	....	9
Lambert	2	....	....	....	....	....	....	....	2
Total	125	77	52	1	46	11	12	4	328

SCHEDULE No. 20.

RETURN OF TEMPERATURE OF WATER FOR YEAR 1906, TAKEN AT THE SHORE CRIB AND THE CITY HALL TAP.

Month.	Degrees Fahrenheit.					
	Shore Crib.			City Hall Tap.		
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January	38	35	36.67	41	38	40.23
February	37	33	34.96	40	36	38.18
March	36	33	34.55	40	36	37.37
April	40	35	36.83	44	38	40.72
May	46	38	41.32	48	40	44.23
June	55	40	44.60	58	44	51.57
July	63	40	48.25	60	45	49.68
August	72	45	58.96	71	49	59.76
September	66	42	54.50	66	47	57.20
October	63	40	51.00	64	46	54.27
November	51	42	44.56	52	44	47.23
December	43	34	36.96	46	39	41.41
Average for Year	50.83	38.08	43.59	52.5	41.83	46.82

ANALYSIS OF TEMPERATURE.

Shore Crib.

The highest on August 25th, 72 deg.; the lowest on March 2nd, 36 deg.; the highest average in August, 58.96 deg.; the lowest average in March, 34.55 deg.

City Hall Tap.

The highest on August 25th, 71 deg.; the lowest on February 17th, 36 deg.; and on March 2nd, 15th, 17th, 20th and 21st it was also 36 deg.; the highest average in August, 59.76 deg.; the lowest average in March, 37.37 deg.

SCHEDULE No. 21.

Leaks on Mains During the Year 1906.

The following leaks on mains were repaired during the year :—

36-inch	7
30 "	5
24 "	12
20 "	2
16 "	..
12 "	72
10 "	3
8 "	..
6 "	126
4 "	6
3 "	..
Total	233 of all sizes.

The cost of repairing these leaks (exclusive of asphalt pavement repairs) was :

Labour	$1,880 80
Material	151 89
Total	$2,032 69

Average number of leaks per mile of distribution	0.78
Average cost per mile	$6.92
Average cost per leak (labor and material)	$8.72

SCHEDULE No. 22.

Maintenance of Distribution, 1906.

Work done by Lombard Street Department.

Months.	House Services.								Services Taken Out.						Leaks on Mains.								Services moved to suit sidewalk.
	Leaks.	Burst Inside.	False Reports.	Blown Out.	Dug Out.	Cleaned Out.	On.	Off.	⅜-inch.	½-inch.	⅝-inch.	¾-inch.	1-inch.	3-inch.	4-inch.	6-inch.	8-inch.	10-inch.	12-inch.	20-inch.	24-inch.	30-inch.	36-inch.	
January	204	26	18	38	158	85	23	63	.	2	.	1	3	.	.	25	.	.	8	.	.	.	.	.
February	234	42	23	43	151	88	14	98	.	3	3	.	.	.	.	7	.	.	5	.	1	.	.	.
March	188	46	6	29	108	88	21	88	2	2	.	.	.	.	.	10	.	2	5	.	3	1	.	.
April	151	28	17	18	190	92	10	52	.	.	.	.	.	.	1	13	.	.	6	1	.	.	1	373
May	163	33	17	27	304	63	17	86	.	4	.	6	1	.	.	7	.	.	2	.	.	.	.	501
June	153	21	20	40	347	40	20	60	1	4	3	5	.	.	.	10	.	.	3	.	.	.	1	252
July	136	12	17	15	195	54	9	36	1	6	1	.	1	.	1	12	.	1	2	.	1	.	1	166
August	152	19	12	40	305	84	11	75	5	8	3	1	3	.	1	9	.	.	7	.	4	2	.	178
September	142	25	9	36	220	230	14	75	5	9	.	1	2	.	.	6	.	.	15	.	2	1	3	98
October	165	33	16	33	400	74	14	90	4	7	2	2	2	.	3	13	.	.	8	.	2	.	2	170
November	138	33	19	44	213	25	18	63	7	14	.	4	4	.	.	6	.	.	7	.	.	.	.	83
December	134	129	17	70	191	162	46	181	5	18	.	2	1	1	.	5	.	.	4	.	.	.	.	30
Total	1,960	447	191	433	2,782	1,085	217	967	30	77	12	22	17	1	6	123	.	3	72	1	13	4	8	1,851

SCHEDULE No. 23.

STATEMENT OF QUANTITY OF WATER PUMPED, AND THE COST OF PUMPING, FIGURED ON COAL, WAGES, MAINTENANCE AND INTEREST AND SINKING FUND.

MAIN PUMPING STATION.

Year.	Total Water Pumped Imp. Gallons.	Total Fuel Pounds.	Cost of Fuel.	Wages.	Total Cost, including Repairs, Fuel, Wages, etc. Main Pump. Station.	Fuel. Cost per 1,000 Galls.	Fuel and Wages. Cost per 1,000 Galls.	Fuel, Wages and Mainten'ce Cost per 1,000 Galls.	Total Working Expenses, including Collection of Revenue, including re Pumping.	Interest and Sinking Fund	Total Cost, including Fuel, Wages, Maintenance, Interest and Sinking Fund	Total Cost per 1,000 Galls. on same.
			$ c.	$ c.	$ c.	Cents.	Cents.	Cents.	$ c.	$ c.	$ c.	Cents.
1870	441,011,250											
1871	509,908,250											
1872	548,746,840											
1873	586,230,295											
1874	789,434,045											
1875	1,390,706,595	5,003,262	17,156 47	5,838 95	25,886 05	1.23	1.65	1.86				
1876	1,625,138,876	6,988,282	19,645 75	6,447 02	30,379 60	1.21	1.60	1.86				
1877	2,633,433,932	10,407,992	25,556 29	7,866 70	36,895 23	0.97	1.26	1.40				
1878	1,417,370,918	8,120,000	15,196 20	7,140 00	25,246 50	1.00	1.51	1.78				
1879	1,610,104,342	10,872,211	19,313 07	7,140 00	29,827 38	1 19	1.63	1.85				
1880	1,785,859,706	11,691,808	28,455 72	7,140 00	39,285 25	1.59	1.98	2.19				
1881	1,910,430,419	12,391,874	31,410 04	7,473 75	42,529 22	1.64	2.03	2.22				
1882	2,108,933,115	11,685,556	30,170 64	8,819 81	43,619 63	1.43	1.84	2.06				
1883	2,809,956,484	17,266,679	43,529 08	10,025 72	59,809 65	1 54	1.89	2.12				
1884	3,645,442,082	19,920,782	52,525 56	10,842 40	69,355 64	1.44	1.73	1.90	117,733 27	150,603 00	268,336 27	7.36
1885	3,537,482,598	18,644,465	46,589 27	12,017 85	65,082 39	1.31	1.64	1.84	104,530 50	151,614 00	256,144 50	7.24
1886	4,134,376,998	19,285,371	41,979 32	14,814 40	65,579 74	1.01	1.36	1.58	112,211 24	159,082 00	271,293 24	6.80
1887	4,417,938,169	23,283,900	50,051 85	16,968 79	76,597 16	1.13	1.51	1.73	130,175 09	163,337 00	293,512 09	6.64
1888	4,041,964,514	20,457,935	46,600 77	19,043 58	76,059 72	1.12	1.58	1.88	135,631 69	171,197 00	306,828 69	7.59
1889	4,148,781,634	19,231,940	44,135 10	20,192 39	75,360 77	1.06	1.54	1.81	161,567 81	181,104 00	342,671 81	8.25
1890	5,249,760,226	24,615,830	56,239 99	21,847 31	83,136 12	1.03	1.44	1.58	168,633 84	226,273 00	394,906 84	7.52
1891	6,534,375,161	29,300,240	60,012 77	22,556 49	89,060 35	0.90	1.24	1.36	182,854 12	226,273 00	409,127 12	6.26
1892	6,659,925,656	34,505,875	71,815 25	21,645 34	103,202 91	1.07	1.39	1.54	180,215 79	222,626 00	402,841 79	6.04
1893	6,646,021,488	26,013,840	64,702 86	27,678 65	100,013 77	0.97	1.37	1.50	188,481 70	224,732 00	413,213 70	6.21
1894	6,589,492,142	26,822,145	54,902 85	25,959 14	103,650 47	0.83	1.22	1.57	183,975 23	224,732 00	408,707 23	6.20
1895	6,639,680,218	21,178,879	40,221 85	23,305 49	75,502 63	0.66	1.01	1.13	148,908 66	224,732 00	373,640 06	5.62
1896	6,781,187,980	18,606,508	25,307 90	22,529 41	55,626 60	0.37	0.70	0.82	145,209 80	225,545 00	370,754 80	5.46
1897	6,723,757,030	29,711,250	26,880 50	22,933 92	57,093 25	0.39	0.73	0.84	141,954 80	225,545 00	367,499 80	5.46
1898	7,136,334,102	22,100,145	27,572 00	23,983 07	53,134 40	0.38	0.71	0.74	146,354 54	222,400 00	368,754 54	5.16
1899	7,824,348,217	24,682,935	26,684 57	24,770 54	71,279 65	0.34	0.65	0.90	162,185 19	222,400 00	384,685 19	4.91
1900	8,064,384,595	24,148,565	38,668 54	27,314 83	80,339 85	0.47	0.80	0.99	169,824 11	222,749 00	392,573 11	4.86
1901	8,299,298,465	26,272,640	39,562 56	28,295 43	78,234 31	0.47	0.81	0.94	171,683 97	222,749 00	394,432 97	4.75
1902	7,993,916,325	23,769,930	37,409 30	28,170 36	74,625 82	0.46	0.82	0.93	175,020 73	223,078 00	398,098 73	4.98
1903	8,735,658,003	30,260,615	54,275 93	31,405 90	93,591 55	0.62	0.98	1.07	197,915 19	226,932 00	424,847 29	4.86
1904	9,076,711,575	32,843,325	52,643 51	30,680 11	94,010 62	0.58	0.91	1.03	217,575 63	252,739 00	470,314 63	5.18
1905	9,174,732,461	34,512,095	49,644 31	32,917 06	89,429 66	0.54	0.89	0.97	219,325 81	252,739 00	472,064 81	5.01
1906	9,859,486,415	27,657,495	39,713 57	42,075 21	92,942 16	0.40	0.83	0.94	224,909 74	253,409 00	478,318 74	4 75

PAVEMENTS, ROADWAYS, PERMANENT SIDEWALKS, PLANK SIDEWALKS AND REPAIRS.

CITY ENGINEER'S DEPARTMENT,
Toronto, December 31st, 1906.

MR. C. H. RUST,
City Engineer.

DEAR SIR,—The following report shows in general and detail the extent and cost of all work done under the supervision of the Roadways Branch of the City Engineer's Department of the City of Toronto for the year 1906.

Four hundred and eighty-three separate works were undertaken and the construction of 62 private permanent walks superintended, making in all 545 works undertaken during the year. This is an increase in the number of works undertaken during the year of 78 over 1905; of 146 over 1904; and of 316 over 1903, and is the greatest number ever undertaken by the Department in any one year.

A summary of the work follows:

Carried over from 1905	40
Contract works	376
Day labor works	107
Private permanent works	62
Total works undertaken	545

The work done included the construction of 25.097 miles of pavements, 43.536 miles of concrete walks and 0.130 miles of brick walks, making a total of 43.666 miles of permanent walks laid during 1906. A reference to Table No. 2 shows that this is an increase in mileage of pavements constructed as compared with 1905 of 7.195 miles or 42 per cent.

The above mileage of pavements includes 3.508 miles of new track allowance constructed and 2.303 miles of old track allowance

reconstructed, leaving 19.157 miles of roadway pavements of which 16.029 miles or 81 per cent. are of a permanent nature.

The mileage of asphalt pavements constructed this year includes the resurfacing of 4.142 miles of worn-out pavements. This, while decreasing the total mileage, still leaves an increase over 1905 of 2.076 miles of new asphalt pavements, and is sufficient evidence to show the increasing popularity of this class of pavement, which at the prices ruling during the last three years is without doubt one of the most economical and reliable to be obtained at present.

43.666 miles of concrete and brick sidewalks were constructed during the year 1906. This is an increase of 16 per cent. when compared with the mileage constructed during 1905, which up to that time constituted the greatest number ever undertaken during any one year by the City of Toronto.

The system of the City Engineer tendering in competition with contractors was continued during 1906, with what should be considered satisfactory results, when the amount of work done by day labor and the actual cost of construction are considered. His tender was found to be lowest on 154 contracts,—101 sidewalks, 35 roadways and 18 curbs. 20 sidewalks and 6 pavements were done by order of Council without the formality of calling for tenders; 3 were done at the request of the Property Commissioner and 2 were taken from the successful tenderers and constructed by day labor on account of dilatoriness on the part of the contractors. Of these 101 were constructed by day labor, while of the remaining 84 works 54 were awarded to contractors at the City's contract price and 30 were carried over to 1907 owing to the inability of the Department to complete them before the close of the season. The saving effected during 1907 through the continuance of this system of tendering was about $2,060, which is an increase of $860 or 71 per cent. over the amount saved on day labor works during the preceding year.

The following table classifies the various works constructed during the year 1906 as compared with those constructed during 1905. A pronounced decrease is to be seen in macadam roadways,

and tar macadam and cedar block pavements. The total shows an increase over 1905 of 85 in the number of works constructed under the direction of this Department.

TABLE No. 1.

Class of Work	*No. of Works.*	
	1905.	1906.
Asphalt	29	39
Bitulithic	9	18
Brick on concrete	9	8
Concrete	2	2
Cedar block, on sand	4	3
Cedar block, on concrete	2	..
Vitrified block (pavement)	3	2
Granite setts	1	..
Macadam	7	4
Macadam (reconstruction)	5	3
Tar macadam (including bituminous macadam)	9	2
Construction of new track allowance (vitrified block)	1	2
Construction of new track allowance (granite)	..	10
Reconstruction of track allowance (scoria, vitrified block and concrete)	5	6
Grading	2	1
Brick sidewalks	1	1
Concrete sidewalks	279	359
Concrete sidewalks (private contract)	75	62
Wood blocks	2	..
Concrete curbing	15	23
	460	545

In connection with pavements and sidewalks, including those proposed but not carried out, the following numbers of plans, drawings and estimates were made. Compared with those made in 1905, it will be seen that the increase in every way is large.

	1905.	1906.
Roadway Plans	80	123
Detailed Drawings	15	19
Estimates	611	883

The first pavements laid under the Local Improvement System were constructed during the year 1881, and the annual variation in mileage of paved and unpaved streets, with classification of same, up to the end of 1906, is shown in Table No. 3.

TABLE No. 3.

SHOWING THE DIFFERENT CLASSES OF PAVEMENTS AND ROADWAYS AND MILEAGE OF SAME FROM 1881 TO 1906.

Year.	Cedar Block.	Stone and Scoria.	Asphalt.	Wood on Concrete	Macadam.	Tar Macadam.	Bitulithic.	Brick.	Gravel.	Concrete.	Unpaved	Total Mileage.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1881.	3.51	0.03	.....	.....	50.92	....	.....	.....	.....	.....	62.39	116.85
1882.	13.41	0.03	.....	.....	48.28	...	.....	.....	.....	.....	55.13	116.85
1883.	26.90	0.03	.....	.....	54.37	...	.....	.....	.....	.....	54.07	135.37
1884.	33.76	0.25	.....	.....	52.32	...	.....	.....	.....	.....	76.77	163.10
1885.	39.84	0.25	.....	.....	50.17	...	.....	.....	.....	.....	75.98	166.24
1886.	48.99	0.36	.....	.....	47.36	...	.....	.....	.....	.....	72.18	168.89
1887.	64.11	0.36	0.07	.....	45.14	...	.....	.....	.....	.....	59.21	168.89
1888.	79.55	0.36	0.25	....	42.76	...	.....	.....	.....	.....	49.87	172.79
1889.	92.39	0.36	3.36	...	38.65	...	.....	.....	.....	.....	107.43	242.19
1890.	109.57	0.36	5.08	.....	36.63	...	.....	.....	.....	.....	90.55	242.19
1891.	116.83	0.59	6.66	0.49	36.39	....	.....	.....	.....	.....	89.44	250.40
1892.	116.86	0.65	10.49	0.49	36.98	....	.....	.....	.....	.....	84.89	252.71
1893.	112.19	0.79	11.28	0.49	34.98	....	.....	.....	.....	.....	82.05	253.35
1894.	111.16	0.81	13.70	0.49	39.95	....	.....	.....	.....	.....	79.98	253.48
1895.	109.78	0.81	14.38	0.49	39.15	.....	.....	0.38	.....	.....	79.48	256.40
1896.	108.70	0.81	14.61	0.53	39.71	.....	.....	1.32	.....	.....	79.74	257.40
1897.	101.36	0.81	15.07	0.53	40.50	.....	.....	3.58	3.22	.....	78.45	258.30
1898.	94.90	0.65	18.30	0.61	41.91	.....	.....	5.91	4.56	.....	78.67	257.93
1899.	81.77	0.65	24.33	0.67	45.03	.....	.....	8.77	5.03	.....	78.14	259.03
1900.	70.49	0.68	30.81	0.67	46.69	0.21	.....	10.77	5.34	.....	77.26	259.12
1901.	61.48	0.81	34.92	0.67	48.56	0.26	....	11.53	5.54	.....	77.22	259.60
1902.	48.57	0.81	39.75	0.25	50.02	1.12	.....	12.51	5.39	.....	77.66	260.14
1903.	43.25	1.15	46.44	0.26	50.11	3.26	.....	14.24	5.87	0.14	79.39	265.40
1904.	*54.33	1.11	52.10	0.26	*54.56	4.20	1.59	15.54	5.83	0.20	75.81	265.45
1905.	*48.83	1.74	56.29	0.26	*54.92	5.46	3.22	17.14	5.83	0.13	82.36	276.13
1906.	*40.53	1.74	63.71	0.51	*54.39	5.70	5.98	18.58	5.83	0.27	80.17	277.46

* Including cedar block and macadam, with paved track allowance respectively.

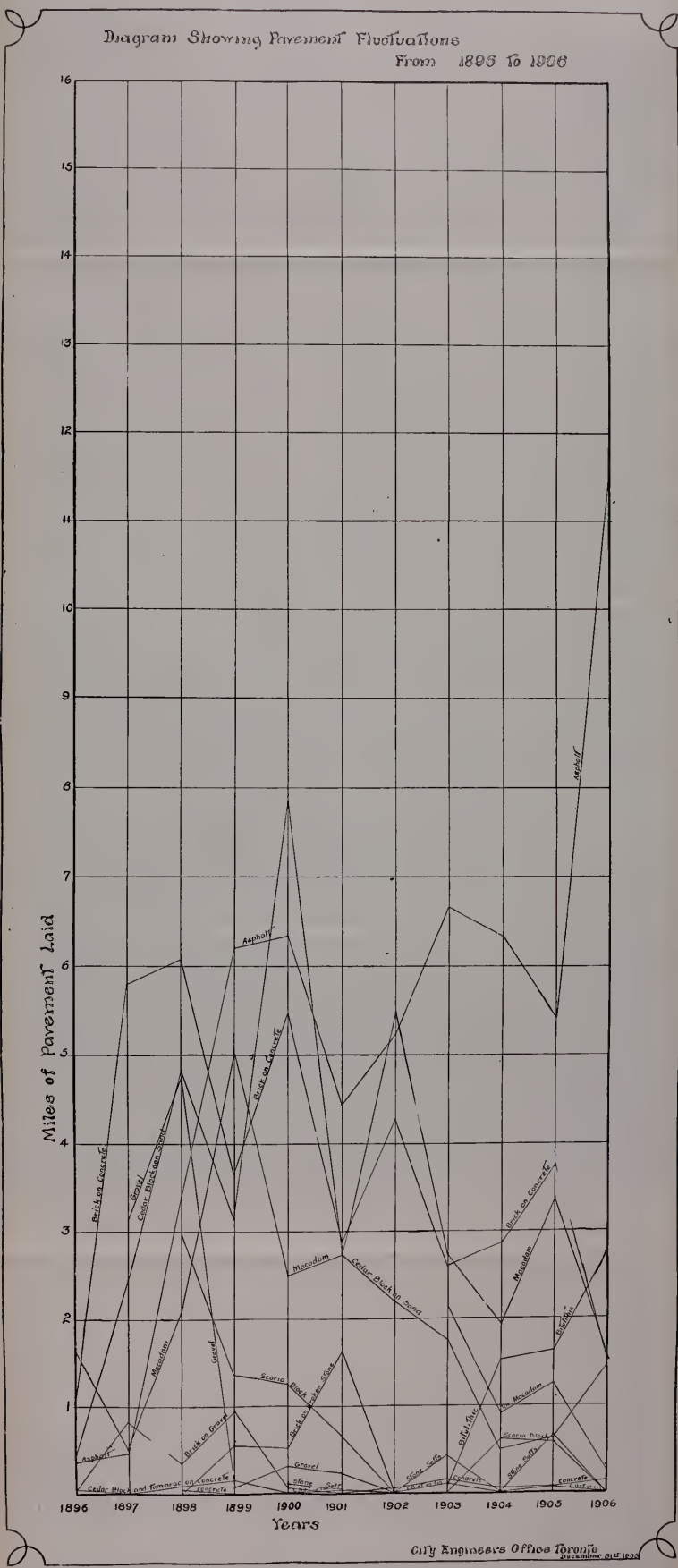


Diagram Showing Pavement Fluctuations
From 1896 to 1906
Miles of Pavement Laid
Years
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
Asphalt
Brick on Concrete
Gravel
Cedar Blocks on Sand
Macadam
Scoria Block
Brick on Gravel
Cedar Blocks and Tamerac on Concrete
Concrete
Stone Setts
Cedarite
City Engineers Office Toronto
December 31st 1906

TABLE No. 2.

MILEAGE OF DIFFERENT CLASSES OF PAVEMENTS, ROADWAYS AND SIDEWALKS LAID FROM 1890 TO 1906.

Class of Work.	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906
Pavem'ts & R'dw'ys:	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Asphalt	1.73	1.635	6.216	5.607	3.067	1.156	0.366	0.460	3.408	6.215	6.348	4.449	5.237	6.662	6.336	5.404	11.600
Bitulithic														0.063	1.528	1.635	2.759
Cedar bl'k on sand & pl'k foundation	15.51	9.186	3.349	3.249	0.852	1.753	0.428	2.459	4.831	3.151	7.842	2.725	2.191	1.774	0.511	0.630	1.441
Macadam		0.123	0.494		0.059	1.663	1.661	0.510	2.089	5.013	2.503	2.733	5.486	2.737	1.940	3.373	1.591
Tar Macadam														2.148	0.920	1.257	0.247
Cobble	0.10	0.069	0.366								0.068						
Tamarac on con	0.192	0.077															
Cedar bl'k on con			8.416	2.185	0.826	0.227	0.038		0.084	0.079		0.021		0.069		0.500	
Stone setts on con.			0.705	3.743	2.563	0.085					0.107	0.028		0.427		0.662	
Scoria bl'ks on con	0.138		0.028			0.117			2.986	1.367	1.247	0.669			0.613	0.600	
Brick on con				3.964	0.787	0.744	1.032	5.803	6.079	3.670	5.472	2.885	4.272	2.602	2.876	3.751	1.504
Brick on gravel							0.028	0.838	0.352	0.943	0.057						
Br'k on br'k'n st'ne										0.546	0.516	1.627					
Concrete pvts						0.071			0.057				0.041	0.147	0.053	0.055	0.144
Gravel								3.138	4.756	0.069	0.303	0.222					
Rec'str't'n of track allowance											0.203	0.270	0.186		0.398		2.303
Granite bl'k track allowance																	2.537
Vitrified bl'k track allowance																	0.971
Totals	17.670	11.090	19.574	18.748	8.154	5.816	3.553	13.208	24.642	21.120	24.666	15.629	17.413	16.839	14.756	17.902	25.097
Sidewalks:																	
Concrete	1.426	1.930	1.508	2.259	1.137	1.918	0.612	1.050	2.548	5.474	15.227	17.305	27.360	34.896	31.058	37.560	43.536
Stone flag	1.273	0.398	0.104	0.035	0.011												
Brick							0.204	0.823	1.188	0.292	0.038	0.511	0.049	0.093	0.001	0.037	0.130
Totals	2.699	2.328	1.612	2.294	1.148	1.918	0.816	1.873	3.736	5.766	15.265	17.816	27.409	34.989	31.059	37.537	43.666

Table No. 4 shows the percentage of the different classes of pavements and roadways:

TABLE No. 4.

*Cedar block	14.62 per cent.
Stone and scoria	.63 "
Asphalt	22.98 "
Wood on concrete	.18 "
*Macadam	19.65 "
Tar macadam	2.05 "
Bitulithic	2.09 "
Brick	6.69 "
Gravel	2.10 "
Concrete	0.09 "
Unpaved	28.92 "

* Including pavement with paved track allowance.

ASPHALT PAVEMENTS.

During the year 1906 eight heavy and twenty-four light asphalt pavements were constructed. In addition to this six worn-out asphalt pavements were stripped of their worn-out surfaces and resurfaced with asphalt. The pavements laid aggregate 59,348 square yards of heavy asphalt, 61,243 square yards of light asphalt, and 80,441 square yards of heavy asphalt surface, and a total length of 11.600 miles. The total length of asphalt pavements in the City is now 63.71 miles, which constitutes 22.98 per cent. of the total length of paved and unpaved streets in the City.

In 1904 a table was compiled showing the maximum, minimum and average price for heavy and light pavements, from 1901 to 1904 inclusive. Below is found this table brought to date by the addition of the prices that prevailed during 1906.

	Maximum.	Minimum.	Average.
1901 Heavy	$2.70	$2.30	$2.54 6/10
" Light	2.23	1.88	2.04 1/2
1902 Heavy	2.60	2.45	2.54
" Light	2.15	1.66	2.01 1/4
1903 Heavy	2.50	2.14	2.21 3/8
" Light	1.88	1.60	1.70
1904 Heavy	2.30	2.15	2.22 6/10
" Light	1.83	1.53	1.65

	Maximum.	Minimum.	Average.
1905 Heavy	2.19	1.99	2.05
" Light	1.66	1.36	1.51
1906 Heavy	2.01	1.79	$1.91\frac{4}{5}$
" Light	1.64	1.38	$1.42\frac{2}{5}$

This shows a drop of 6 per cent. in the contract cost of heavy asphalt and 6 per cent. in that of light asphalt, as compared with the prices prevailing in 1905.

The repairing of asphalt pavements, upon which the periods of guarantee have expired, was let by tender, the prices for the year being 78 cents per square yard for both the heavy and light surfaces, and $5.75 per cubic yard for concrete foundation. The expenditure for asphalt repairs in 1906 amounted to the sum of $30,980.

Concrete curbing has entirely superseded stone curbing in the construction of asphalt pavements, 41,073 lineal feet of combined concrete curbing and gutter and 79,295 lineal feet of concrete gutter only, having been laid during the year 1906. The forecast of last year that 6-inch concrete curbing would be largely used in preference to the 5-inch curbs has been fulfilled. In nearly every case the 6-inch class has been constructed and the more substantial appearance is well worth the slight increase in the cost.

The quantities, prices and other details connected with the asphalt pavements constructed during the year are tabulated in Tables Nos. 7 and 8. The physical and chemical analysis of the asphalt mixtures used in paving during the year are also tabulated separately.

Table No. 5 is a list of the streets paved with asphalt on which the contractors' terms of guarantee have expired.

TABLE No. 5.

SHOWING STREETS PAVED WITH ASPHALT UPON WHICH THE CONTRACTORS' GUARANTEES HAVE EXPIRED.

Street.	From.	To.	Length Feet.	Date of Expiry of Guarantee.
Wellington	Church	Yonge	900	June 28, 1894
Sherbourne	Queen	Bloor	6,786	June 1, 1895
Simcoe	King	Queen	1,182	Aug. 1, 1895
Ontario	Carlton	Howard	2,824	July 28, 1895
Sherbourne	King	Queen	1,160	July 2, 1895
Bloor	Yonge	Sherbourne	2,661	Nov. 18, 1895
Scott	Front	Colborne	374	Nov. 7, 1895
Wellington	Bay	York	848	July 18, 1896
Gerrard	Jarvis	Sherbourne	934	July 14, 1896
Melinda	Yonge	Bay	587	Aug. 5, 1896
Jordan	Wellington	King	379	Aug. 5, 1896
Sherbourne	The bridge	South Drive	1,076	Nov. 11, 1896
St. George	College	Bloor	3,286	Sept. 25, 1896
Toronto	N. line stone pvts.	Adelaide	349	May 1, 1897
Adelaide	York	Spadina	3,001	July 21, 1897
Victoria	King	Adelaide	414	Sept. 1, 1897
Rose	Howard	Winchester	2,134	Sept. 1, 1897
St. James	Ontario	Parliament	595	Sept. 7, 1897
Devonshire Pl	Hoskin	Bloor	1,228	Sept. 30, 1897
Richmond	Victoria	Bay	852	June 27, 1898
Earl	Sherbourne	West terminus.	634	July 13, 1898
Winchester	Parliament	Sumach	1,512	Aug. 24, 1898
Munn's Lane	Wellington	218 ft. north	218	Aug. 23, 1898
Czar	Yonge	North	666	Sept. 25, 1898
Lane Around Inland Revenue Office			265	Oct. 5, 1898
Linden	Sherbourne	Huntley	585	Oct. 21, 1898
Hoskin	St. George	Queen's Pk. cr.	1,130	June 27, 1899
Carlton	Jarvis	Sherbourne	937	June 7, 1899
Bleecker	Carlton	Wellesley	1,412	July 5, 1899
Wellesley	Sherbourne	Parliament	1,227	Sept. 25, 1899
Cecil	Spadina	Beverley	1,052	Sept. 27, 1899
Adelaide	Yonge	Church	903	Nov. 8, 1899
King	Simcoe	Sherbourne	4,999	June 15, 1899
Leader Lane	King	Colborne	197	May 25, 1900
Avenue Road	Bloor	Davenport	2,289	Aug. 29, 1900
St. Patrick	McCaul	Beverley	606	Sept. 9, 1900
Victoria	Adelaide	Queen	694	Sept. 28, 1900
Lane 1st W. of Yonge	Adelaide	Temperance	177	May 28, 1901
Also lane running	E. and W. from	above lane	303	May 28, 1901
Leader Lane	Wellington	Colborne	193	May 25, 1901
Queen Street bridge		At Don	134	July 25, 1905
Brunswick Ave.	College	Ulster	1,262	Oct. 20, 1906

BRICK PAVEMENTS.

During 1906 the brick pavements laid aggregate 1.504 miles as compared with 1.633 miles in 1905, and the construction and reconstruction of track allowance aggregated 2.201 miles: compared as to area, 32,576 square yards of brick pavement of all kinds was constructed in 1906, 41,656 square yards in 1905, and 27,946 square yards in 1904. The material used most extensively in brick pavements during 1906 was the Canadian block. This was mainly due to the large increase in the price of the American product, which was raised to $25 per thousand.

The quality of the blocks, as determined by the standard abrasion test after 1,000 revolutions and 2,000 revolutions, is represented by the ratio:

Canadian (after 1,000 revolutions)	13	per cent.
American (after 1,000 revolutions)	12.6	"
Canadian (after 2,000 revolutions)	20.5	"
American (after 2,000 revolutions)	19.3	"

To obtain these results 14 samples of Canadian block were tested and 4 samples of American block.

In constructing brick pavements during the year, 9,944 lineal feet of concrete curbs was placed. The quantities, price and other details of the brick pavements constructed during the year are shown in Tables Nos. 7 and 8.

TRACK ALLOWANCE CONSTRUCTION.

The track allowance construction during the year shows 0.971 miles of new vitrified block construction, 1.231 miles of vitrified block reconstruction, and 1.072 miles of concrete reconstruction, or a total of 3.274 miles of all kinds compared with 2.718 miles constructed in 1905.

In addition to the above, 2.537 miles of granite block track allowance construction was put down. The construction of this new work embodied some ideas which had not previously been tried. While of the standard type, the foundation was reinforced by means of old 4½-inch T rails cut into 6¼-ft. lengths, which were placed in an

inverted position, in trenches left for them at intervals of 15 feet. At the middle points between these ties, wooden blocks were imbedded in the concrete in such positions that at every 15 feet there would be one block under each rail. The dimensions of these blocks were 10 inches square at the top, 15 inches square at the bottom, by 6 inches in depth. The rails used were 62 feet in length, weighing 90 lbs. per yard, a large wooden tie being placed under each joint. When the rails had been placed, they were bolted together and fastened to the steel ties by means of shaped plates bolted to the ties. After the rails had been aligned and topped, they were spiked to the wooden blocks and ties, and the trenches were filled in with mortar, imbedding the steel and wooden ties solidly in the foundation. Any spaces existing between the base of the rail and foundation were then floated with mortar. The granite blocks were then laid in the usual manner on a sand cushion and grouted, the interstices between the blocks and the rails being filled with mortar.

This construction, while it provides the nearest approach yet attained in this City to an absolutely rigid bond between the concrete foundation and the rails, lends itself to strengthening the foundation, as the steel ties may be looked upon in the light of reinforcing pieces.

Cross sections are shown in this report of the class of construction described above.

CEDAR BLOCK PAVEMENTS.

During the year there were laid 1.441 miles of cedar block pavements on sand. This mileage, when compared with the amount laid last year, shows an increase of .811 miles or more than 100 per cent. Although this is a tremendous increase in the actual mileage, it does not give a correct impression of the position which this class of pavement occupies in the scale of popular opinion. When the fact is considered that the contract for one street constituted 1.25 miles out of a total mileage of 1.441, it will be readily admitted that the popularity of cedar block as a pavement is waning.

In connection with cedar block pavements 15,032 lineal feet of concrete curb was constructed. Stone curbing and wooden curbing were not used in any work.

Tables Nos. 7 and 8 show in detail the quantities and cost of the cedar block pavement laid during the year.

Table No. 6 shows the sections of streets on which the final assessment for pavements have been paid or will be paid during the ensuing year. Many of these pavements are beyond repair.

TABLE No. 6.

LIST SHOWING DATE OF FINAL ASSESSMENT ON DIFFERENT CLASSES OF PAVEMENTS.

Street.	From.	To.	Class of Pavement.	Date When Laid.	Date Final Ass'sm't Paid.
Adelaide	York	Spadina	Asphalt	1892	1900
Adelaide	Bay	York	Cedar bl'ck	1899	1904
Adelaide	Yonge	Church	Asphalt	1894	1904
Afton Ave	Lisgar	Northcote	Gravel	1898	1901
Alma	Gladstone	Dufferin	Cedar bl'ck	1901	1906
Amelia	Sumach	Parliament	Brick	1895	1906
Argyle	Dundas	Gladstone	Cedar bl'ck	1895	1900
Arthur	Bathurst	Euclid	"	1898	1903
Argyle	Dundas	Shaw	"	1900	1905
Arthur	Euclid	Dundas	"	1900	1905
Avenue Rd.	Bloor.	Davenport	Asphalt	1895	1905
Avenue Pl.	Avenue Rd.	Hazelton	Macadam.	1901	1906
Balmuto	Bloor	Czar	"	1901	1906
Barton Ave.	Manning	Euclid	Cedar bl'ck	1890	1900
Barton Ave.	Palmerston	Euclid	"	1892	1897
Barton Ave.	Brunswick	Howland	"	1892	1898
Bathurst.	S. s. of Bridge.	North Ry. Gate.	"	1886	1897
Bathurst	Front	Niagara	"	1898	1903
Bay	King	Queen	Asphalt	1891	1899
Bay	Front	Esplanade	Cedar bl'ck	1899	1904
Beaconsfield Ave	Queen	Afton	Gravel	1898	1901
Beaconsfield Ave	Afton	Dundas.	"	1898	1901
Beatty Ave.	King	Queen	Cedar bl'ck	1899	1904
Beau	Elm	South Drive.	Macadam.	1900	1905
Bellwoods	Queen	Mansfield	Cedar bl'ck	1900	1905
Beverley	Queen	College	Macadam.	1896	1901
Berryman	Davenport	Hazelton	Cedar bl'ck	1900	1905
Birch Ave.	Yonge	West terminus.	"	1890	1900
Bismark Ave.	Yonge	Park Rd.	Macadam.	1891	1897
Bismark Ave.	Park Rd.	East end	Cedar bl'ck	1891	1897
Bleecker	Wellesley	Howard	"	1893	1898
Bleecker	Carlton	Wellesley	Asphalt	1894	1902
Blevins	Sumach	East end.	Cedar bl'ck	1896	1897
Bloor	Yonge	Avenue Rd.	Macadam.	1889	1895
Bloor	Yonge	Sherbourne	Asphalt	1890	1900
Bloor	Bathurst	Clinton	Cedar bl'ck	1889	1901
Bloor	Shaw	Dufferin	"	1890	1901
Bloor	Clinton	Shaw.	"	1891	1901
Bloor	Dufferin	Lansdowne	"	1894	1901
Bolton Ave.	Queen	Gerrard	"	1898	1903
Booth Ave.	Queen	Eastern	"	1891	1896
Borden	Ulster	Bloor	"	1900	1905
Breadalbane	Yonge	St. Vincent.	Macadam	1902	1905
Brighton Ave.	Pape	East end.	Cedar bl'ck	1890	1899

Street.	From	To	Class of Pavement.	Date When Laid.	Date Final Assessm't Paid.
Broadview	Withrow	Danforth	Cedar Bl'ck	1890	1898
Broadview	Queen	Gerrard	"	1887	1897
Broadview	Gerrard	Withrow	"	1887	1897
Broadview	Queen	Eastern	"	1891	1896
Broadway Pl.	Spadina	159 ft. 3 ins. west	"	1899	1904
Brock Ave.	Railway tracks.	Dundas	Gravel	1898	1901
Brock Ave.	Logan	Howland	Cedar bl'ck	1888	1898
Brock	Dundas	1,000 ft. s. Bloor.	Macadam	1901	1906
Brooklyn	Queen	Dagmar	"	1901	1906
Brunswick	College	Ulster	Asphalt	1896	1906
Bruce	Shaw	Givens	Cedar bl'ck	1892	1897
Caer-Howell	McCaul	Simcoe	Macadam	1902	1905
Caer-Howell	University	Simcoe	"	1902	1905
Casimir	St. Patrick	North to a lane	Cedar bl'ck	1889	1898
Cameron	Queen	Cameron Pl.	Brick on gravel.	1899	1905
Carlaw Ave.	Queen	Eastern	Cedar bl'ck	1889	1899
Carlaw Ave.	Eastern	Bay	"	1885	1897
Carlton	Sackville	Sumach	Macadam	1898	1903
Carlton	Jarvis	Sherbourne	Asphalt	1894	1904
Carlyle	St. Patrick	376 ft. north	Cedar bl'ck	1899	1904
Caroline	Queen	Eastern	"	1889	1899
Carr	Esther	End of Carr	"	1894	1899
Cecil	Spadina	Beverley	Asphalt	1894	1904
Charles	Church	Jarvis	Cedar bl'ck	1897	1902
Christie	Bloor	Melville	"	1891	1898
Churchill	Term of Pav't	136 ft. east	"	1893	1898
Clara	Oak	Oxford	"	1886	1896
Clarence Sq.	North-east	South sides	"	1898	1903
Claremont	Arthur	Mansfield	"	1900	1905
Claremont	Robinson	Arthur	"	1900	1906
Classic Pl	Huron	East end	Macadam	1897	1902
Clifford	Stafford	Strachan	Cedar bl'ck	1887	1897
Clinton	Mansfield	College	"	1899	1904
Cluny Ave.	Roxborough	Crescent Rd.	"	1891	1897
Cluny Ave.	Crescent Rd.	Rosedale Rd.	Macadam	1901	1906
Colborne	Church	West Market	Cedar bl'ck	1898	1903
Collahie	Gladstone	Beaconsfield	Gravel	1899	1902
Cottingham	1,350 ft. w. of Yonge	Avenue Rd	Cedar bl'ck	1886	1896
Cottingham	Rathnally	Poplar Plains Rd.	"	1889	1899
Coolmine	Dundas	St. Anne's	Macadam	1901	1906
Crawford	Arthur	North End	Brick on gravel.	1899	1905
Crescent Rd.	Yonge	Rosedale Rd	Macadam	1899	1904
Crocker	Bellwoods	Claremont	Cedar bl'ck	1890	1900
Czar	Yonge	North	Asphalt	1893	1901
Concord	College	Dewson	Cedar bl'ck	1901	1906

Street.	From	To	Class of Pavement.	Date When Laid.	Date Final Assessm't Paid.
D'Arcy	McCaul	Spadina	Cedar bl'ck	1895	1900
Darling	North term.	End of sewer	"	1891	1896
Davenport Rd.	Yonge	Hazelton	Macadam	1898	1903
Davenport Rd.	Avenue Rd.	636 ft. west	Macadam	1900	1905
Davies Ave.	Queen	Matilda	Cedar bl'ck	1894	1899
Defoe	Tecumseth	Niagara	"	1890	1900
Delaware Ave	College	Bloor	"	1892	1897
Delaware Ave	Bloor	Van Horne	"	1891	1897
Devonshire Pl.	Hoskin	Bloor	Asphalt	1892	1902
Dewson	Ossington	Dovercourt	Cedar bl'ck	1890	1900
Division	Spadina	Huron	Macadam	1899	1904
Dovercourt Rd.	Bloor	Van Horne	Cedar bl'ck	1891	1901
Dovercourt Rd.	Queen	Dundas	Gravel	1898	1901
Dovercourt Rd.	Dundas	Churchill	Cedar bl'ck	1900	1906
Dovercourt Rd.	College	Bloor	"	1901	1906
Dufferin	Peel	Dundas	Gravel	1898	1901
Dufferin	King	G. T. R.	Cedar bl'ck	1889	1898
Dufferin	Bloor	Union	"	1891	1901
Dufferin	Dundas	Lindsay	Macadam	1899	1904
Dunn Ave	Queen	Lake	Gravel	1898	1901
Dunbar Rd	Elm	South Drive	Cedar bl'ck	1890	1900
Dundas	Soraurен	Bloor	"	1893	1898
Dundas	Ossington	Lansdowne	"	1900	1905
Dupont	Bathurst	Manning	"	1892	1897
Earnbridge	Strickland Pl.	100 ft. west	Macadam	1901	1906
Earl	Sherbourne	West term	Asphalt	1893	1898
Elgin Ave.	Avenue Rd.	Bedford Rd.	Macadam	1899	1904
Elliott	Broadview	Bolton	Cedar bl'ck	1898	1903
Elm Grove	King	Queen	Gravel	1898	1901
Elm	Yonge	University	Macadam	1899	1902
Empress Cr	Dowling	Jamieson	Cedar bl'ck	Parkdale	1897
Empress Cr	Dunn	Jamieson	"	1893	1898
Euclid Ave	Arthur	College	"	1897	1902
Euclid Ave	Bloor	Follis	"	1890	1898
Euclid Ave	Arthur	Robinson	"	1899	1904
Euclid Pl	Euclid Ave.	East term.	"	1893	1899
Evans Ave.	Clinton	West term	"	1892	1898
Farquhar's Lane	Front	Esplanade	C'bblest'ne	1900	1905
Fenning	Queen	Humbert	Brick	1897	1903
First Ave.	Broadview	Logan	Macadam	1899	1904
Florence	Dufferin	Brock	Cedar bl'ck	1899	1904
Frankish	Brock.	Sheridan	"	1890	1899
Frizzell	Carlaw	Pape	"	1891	1900
Front	Sherbourne	Trinity	Macadam	1899	1902
Front	George	Sherbourne	"	1899	1902
Foxley	Dundas	Dovercourt	Gravel	1898	1901
Gerrard	Broadview	Howland	Cedar bl'ck	1888	1897

Street.	From.	To.	Class of Pavement.	Date When Laid.	Date Final Assessm't Paid.
Gerrard	Jarvis	Sherbourne	Asphalt	1891	1901
Gerrard	Yonge	Jarvis	Macadam	1899	1904
Gildersleeve	Sumach	East End	Cedar bl'ck	1894	1899
Givens	Queen	Argyle	Macadam	1898	1903
Gladstone	Queen	Dundas	Cedar bl'ck	1897	1902
Gloucester	Yonge	Church	Macadam	1903	1906
Gordon	Sheridan	Dufferin	Cedar bl'ck	1891	1896
Grange	Huron	Spadina	Macadam	1903	1906
Grace	Arthur	College	Cedar bl'ck	1891	1902
Grafton Ave	Roncesvalles	Triller	"	1891	1899
Grand Opera House Lane.	Adelaide	149 ft. south	Concrete	1896	1902
Grange Rd	Beverley	McCaul	Macadam	1900	1903
Grange Ave	Spadina	Esther	Brick	1897	1903
Grange Ave	Beverley	Huron	Macadam	1902	1905
Grenville	Yonge	Surrey Pl	"	1899	1905
Grant	Kintyre	North term	Cedar bl'ck	1890	1900
Grosvenor	Yonge	Queen's Park	Gravel	1900	1903
Gwynne Ave	King	Queen	Cedar bl'ck	1898	1903
Halton	Shaw	Dundas	"	1892	1897
Hamburg Ave	Bloor	Union	"	1891	1899
Hamilton	Paul	Elliott	"	1890	1899
Hamilton	Queen	Paul	"	1891	1896
Harbord	Huron	Bathurst	"	1897	1902
Harbord	St. George	Huron	Macadam	1898	1903
Henderson	Clinton	Grace	Cedar bl'ck	1891	1898
Henderson	Manning	Clinton	"	1900	1905
Herrick	Bathurst	Lippincott	"	1892	1897
Heward Ave	Queen	Eastern Ave	"	1889	1899
Henry	College	Baldwin	Brick	1896	1906
Hickson	St. Clarens	294 ft. east	Macadam	1900	1905
High Park Ave.	Roncesvalles	High Park	Cedar bl'ck	1893	1899
Hoskin Ave	St. George	Q's P'k Cr. Drive	Asphalt	1894	1904
Howard Pk. Av.	Dundas	Roncesvalles	Cedar bl'ck	1891	1901
Howie	Clark	North End	"	1889	1899
Humbert	Dovercourt	Dundas	"	1898	1903
Huntley	Bridge	Elm	"	1890	1900
Huron	Phoebe	Grange	"	1893	1898
Huron	Bernard	Dupont	Macadam	1901	1906
Isabella	Sherbourne	Jarvis	"	1898	1901
Isabella	Yonge	Jarvis	"	1901	1906
Jarvis	King	Queen	"	1896	1899
Jarvis	Queen	Bloor	Asphalt	1889	1899
John	King	Queen	Cedar bl'k.	1890	1900
John	King	Front	Macadam	1895	1899
John	Bridge	Lake	"	1898	1903

Street.	From.	To.	Class of Pavement.	Date When Laid.	Date Final Assessm't Paid.
Johnston's Lane	Adelaide	South end	Brick	1897	1903
Jordan	Wellington	King	Asphalt	1891	1899
King	334 ft. w. of Jefferson.	1,900 ft. east	Tamarac	1891	1899
King	Simcoe	Sherbourne	Asphalt	1893	1903
King	Berkeley	236 ft. e. River	Cedar bl'k.	1901	1906
Lane s. King	e.s. Leader Lane	End of Lane	Concrete	1895	1905
Lane bet. St. Patrick & D'Arcy.	Huron	Beverley	Cedar bl'k.	1892	1897
Lane s. of Pearl.	Near Simcoe		Cobble	1892	1897
Lane e. of Spadina.	Grange	St. Patrick	"	1892	1897
Lane s. of Pearl.	Simcoe	York	"	1892	1897
Lane bet. Yonge and Victoria.	Gould	Wilton	"	1887	1897
Lane bet. Yonge and Victoria.	Adelaide	106 ft. south	"	1892	1897
Lane bet. York and Simcoe.	North of Pearl	Near Adelaide	Cedar bl'k.	1888	1898
Lane 1st n. of Queen.	Mutual	Jarvis	"	1888	1898
Lane n. of Wilton Cres.	Pembroke	George.	"	1888	1898
Lane bet. Queen and Richmond	Church	East terminus	Cobble	1888	1898
Lane 1st w. of Yonge.	Temperance	n.s. Adelaide	Asphalt	1896	1906
Lane lying bet. Temperance & Adelaide.	Comm'cing at a Yonge St., th	point 89 1/2 ft. w. of ence w. 313 1/2 ft.	"	1896	1906
Lane s. of Queen	Tecumseth	Niagara	Cobble	1893	1898
Lane rear of John	Adelaide	Lane n. of Arlington Hotel.	Cedar bl'k.	1892	1898
Lane e. of Bay	Wellington	214 ft. south	"	1888	1899
Lane 1st e. of Bay	Wellington	Melinda	Concrete	1895	1900
Lane n. of Foxley	Foxley	135 ft. north	Cedar bl'k.	1889	1899
Lane 1st s. of Q'n	Simcoe	Duncan	"	1889	1899
Lane bet. Borden and Lippincott	Ulster	Bloor	"	1891	1896
Lane rear Standard Bank			Scoria	1892	1902
Lane rear Inland Revenue Office			Asphalt	1893	1901
Lansdowne	Queen	Union	Gravel	1898	1901
Lansdowne	Dundas	Bloor	Cedar Bl'ck	1889	1899
Leader Lane	King	Colborne	Asphalt	1895	1905
Leader Lane	Wellington	Colborne	"	1896	1906
Leslie	Queen	Ashbridge's Bay	"	1891	1901

Street.	From.	To.	Class of Pavement.	Date When Laid.	Date Final Assessm't Paid.
Linden	Sherbourne	Huntley	Asphalt	1893	1901
Lippincott	Nassau	College	Cedar Bl'ck	1900	1905
Lisgar	Queen	Afton	Gravel	1897	1900
Lisgar	Dundas	Afton	"	1898	1901
Lobb	Shaw	Crawford	Cedar Bl'ck	1890	1900
Logan Ave	Queen	Ashbridge's Bay	"	1889	1898
Logan Ave	Gerrard	Danforth	"	1889	1899
Lorne	Front	Esplanade	"	1899	1904
Lucas	Sorauren	Roncesvalles	"	1892	1897
McAlpine	Davenport	McMurrich	"	1891	1897
McCaul	Queen	College	"	1898	1903
McDonnell	Queen	2826 ft. north	Gravel	1898	1901
McDonnell Sq	Bathurst	Defoe	Macadam	1900	1903
McMaster Ave	Avenue Rd	Rathnally	Cedar Bl'ck	1890	1900
McPherson Ave	Rathnally	Poplar Plains Rd.	"	1890	1901
McPherson Ave	Yonge	1330 ft. west	Macadam	1899	1904
Manning Ave	Robinson	Queen	Cedar Bl'ck	1889	1898
Manning Ave	Bloor	Hammond Pl	"	1890	1900
Manning Ave	Arthur	College	"	1900	1905
Manning Ave	Robinson	Arthur	"	1901	1906
Mansfield	Clinton	Bellwoods	"	1900	1905
Mansfield	Manning	Clinton	"	1893	1898
Mansfield	Bellwoods	Grace	"	1893	1899
Maple Grove	O'Hara	Brock	"	1899	1904
Maple	Glen	Sherbourne	Macadam	1900	1905
Marion	Lansdowne	McDonnell	Cedar Bl'ck	1891	1899
Markham	Herrick	Bloor	"	1889	1898
Margueretta	Dundas	Bloor	"	1901	1906
Marion	Fuller	Sorauren	"	1901	1906
Massey	King	Queen	"	1891	1897
Maude	Adelaide	Farley	"	1887	1897
Melbourne Ave	Cowan	Dufferin	Gravel	1897	1900
Melinda	Yonge	Bay	Asphalt	1891	1899
Metcalfe	Winchester	Amelia	Cedar bl'k.	1900	1905
Millstone Lane	York	East end	"	1889	1899
Minnis Lane	Wellington	218 ft. north	Asphalt	1893	1901
Morse	Queen	2,103 ft. southerly	Cedar bl'k.	1901	1906
Murray	Cær Howell	North end	"	1898	1903
Napier	Munro	Lane	"	1891	1896
Nassau	Lippincott	Bathurst	"	1899	1904
New	Davenport Rd.	West end	"	1889	1899
North	St. Mary	Bloor	Macadam	1900	1905
Northcote	Queen	Afton	Cedar bl'k.	1895	1900
Northumberland	Ossington	Preston	"	1893	1898
Noble	Queen	100 ft. w. Strickland Pl.	Macadam	1901	1906
O'Hara	1,605 ft. n. Que'n	Railway tracks	Cedar bl'k.	1892	1897

Street.	From.	To.	Class of Pavement.	Date When Laid.	Date Final Assessm't Paid.
O'Hara	Queen	1,455 ft. north	Gravel	1898	1901
Olive	Bathurst	Palmerston	Cedar bl'k.	1893	1898
Ontario Place	Ontario	270 ft. west	"	1886	1896
Ontario	Carlton	Howard	Asphalt	1890	1900
Osler	Royce	C. P. R. tracks	Cedar bl'k.	1892	1898
Ossington	Bloor	C. P. R. tracks	"	1892	1897
Ossington	Harrison	College	"	1888	1899
Ossington	College	Bloor	"	1900	1905
Oxford	Augusta	Spadina	"	1895	1900
Oxford	Augusta	Lippincott	"	1899	1905
Palmerston	Robinson	Arthur	"	1900	1905
Palmerston	Bloor	Dupont	"	1890	1899
Pape Ave	Queen	Danforth	"	1887	1897
Parliament	Wellesley	Howard	"	1888	1895
Parliament	Queen	Gerrard	Macadam	1899	1904
Parliament	King	Mill	"	1901	1906
Pearson	Sorauren	Roncesvalles	Cedar bl'k.	1901	1906
Peel	Gladstone	Dufferin	Gravel	1898	1901
Pembroke	Shuter	Wilton	Macadam	1899	1902
Pembroke	Wilton	Gerrard	"	1903	1906
Perth Ave.	Bloor	Royce	Cedar bl'k.	1893	1898
Peter	Front	Wellington	"	1886	1897
Peter	King	Queen	"	1890	1900
Pinehill Rd	Rosedale Rd	West end	Macadam	1894	1899
Poulett	Sydenham	South term.	Cedar bl'ck	1890	1896
Powell	Dale	Maple	Macadam	1901	1906
Prospect	Rose	Ontario	Cedar bl'ck	1889	1899
Queen	G. T. Ry	Pape	"	1900	1905
Queen	Pape	Greenwoods	"	1900	1905
Queen	Gwynne	Roncesvalles	"	1898	1903
Queen	Gladstone	Niagara	"	1898	1903
Queen,	Yonge	River	Asphalt	1894	1904
Queen's Park Drive.	Queen's Pk. Cr.	Bloor	Macadam	1898	1903
Queen's Pk. Cr Drive, e.s.	University Cr.	Road running n. from Park.	"	1897	1900
Renfrew Pl	McCaul	East End	Cedar bl'ck	1889	1899
Richmond Pl	Richmond	South End	"	1886	1896
Richmond	Bay	York	Macadam	1897	1900
Richmond	Victoria	Bay	Asphalt	1893	1901
River	Gerrard	Spruce	Macadam	1900	1905
Robinson	Palmerston	Euclid	Cedar bl'ck	1886	1896
Rolyat	Dundas	Grove	"	1899	1904
Roncesvalles	Queen	Dundas	"	1890	1900
Rose Ave	Howard	Winchester	Asphalt	1892	1900
Roseberry Ave.	Bathurst	East End	Cedar bl'ck	1894	1899
Rossin H'se la.	York	East End	Cobble	1891	1897

Street.	From.	To.	Class of Pavement.	Date When Laid.	Date Final Assessm't Paid.
Roxborough Av.	Yonge	1,328 ft. w	Cedar bl'ck	1892	1897
Roxborough La.	Yonge	2,180 ft e	"	1891	1900
Royce Ave	Symington Av.	C. P. R	"	1893	1898
Rush Lane	Esther	Portland	"	1890	1900
Rusholme Rd	Hepbourne	Bloor	"	1890	1900
Russell	St. George	Spadina	"	1899	1904
St. Albans	Yonge	Surrey Pl	Macadam	1903	1906
St. Albans	Surrey	Queen's Pk	"	1898	1903
St. Clarens Ave.	Wyndham	Dundas	Cedar bl'ck	1889	1898
St. Clarens Ave.	Dundas	College	"	1890	1900
St. George	College	Bloor	Asphalt	1891	1901
St. James Ave.	Ontario	Parliament	"	1892	1899
St. Joseph	St. Vincent	698½ ft. west	Macadam	1901	1906
St. Patrick	Bathurst	Denison	Cedar bl'ck	1898	1903
St. Patrick	Beverley	McCaul	Asphalt	1895	1905
St. Marys	Yonge	W. end St. Mary.	Macadam	1900	1905
Sackville	Gerrard	Carlton	Cedar bl'ck	1899	1904
Sackville	Wellesley	256 ft. north	Macadam	1899	1904
Sackville	Wellesley	Winchester	Macadam	1899	1904
Salisbury Ave.	Sackville	East term.	Cedar Bl'ck	1886	1897
Scollard	Yonge	Hazelton	C. B. & Br'k in track.	1898	1903
Scott	Front	Colborne	Asphalt	1890	1900
Selby	Sherbourne	Huntley	Brick	1895	1905
Shaw	Arthur	College	Cedar Bl'ck	1900	1905
Shaw	College	Bloor	"	1893	1898
Shaw	Queen	Defoe	"	1891	1901
Shaw	Queen	Arthur	"	1898	1903
Shaftesbury Ave.	Yonge	1100 ft. east	"	1890	1899
Sheppard	Adelaide	Richmond	Macadam	1895	1899
Sherbourne	Bridge	South Drive	Asphalt	1891	1901
Sherbourne	King	Queen	"	1890	1899
Sherbourne	Queen	Bloor	"	1889	1899
Shirley	Brock	St. Clarens	Cedar Bl'ck	1891	1898
Shuter	Yonge	Sherbourne	Macadam	1901	1904
Simcoe	Front	Station	Cedar Bl'ck	1896	1901
Simcoe	King	Queen	Asphalt	1890	1900
South Drive	Crescent Rd	Scarth Rd	Macadam.	1893	1898
South Drive	e.s. South Drive running s.	Glen Rd	"	1899	1904
Spadina	Front	King	"	1900	1905
Spadina	Queen	Adelaide	Cedar Bl'ck	1899	1904
Spadina Rd	Bernard	C. P. R.	"	1891	1901
Spruce	River	Sumach	Macadam	1899	1904
Sully	Arthur	College	"	1901	1906
Sully Cres.	Shaw	Sully	Cedar Bl'ck	1899	1904
Sumach	King	Eastern	"	1890	1899
Sumach	Gerrard	Wellesley	Macadam	1899	1904
Sumach	King	Gerrard	Cedar Bl'ck	1900	1905

Street.	From.	To.	Class of Pavement.	Date When Laid.	Date Final Assessm't Paid.
Strickland Pl.	Noble	Earnbridge	Macadam	1900	1905
Sword	Gerrard	Spruce	"	1899	1904
Temperance	Yonge	Bay	"	1896	1899
Teraulay	Queen	Albert	"	1898	1903
Thompson	Davies	Munro	Cedar bl'ck	1890	1900
Tecumseth	Queen	Walnut	"	1901	1906
Toronto	N. King	Adelaide	Asphalt	1892	1897
Trinity	Mill	King	Cedar bl'ck	1900	1905
Tyndall Ave	King	Springhurst	Macadam	1898	1900
Ulster	Major	Bathurst	Cedar bl'ck	1900	1905
Ulster	Bathurst	Markham	"	1894	1899
Vanauley	Queen	Grange	"	1886	1897
Vanauley	St. Patrick	St. Andrew	"	1887	1897
Victor Ave.	Logan	Broadview	Macadam	1899	1904
Victoria	Adelaide	Queen	Asphalt	1895	1905
Victoria Lane	Queen	Shuter	Cobble	1890	1899
Virtue	Sorauren	East terminus	Cedar bl'k.	1890	1900
Victoria	King	Adelaide	Asphalt	1892	1900
Vermont	Palmerston	Manning	Cedar bl'k.	1891	1896
Walmer Rd	Bloor	Lowther	"	1897	1902
Walmer Rd	Lowther	Castle	"	1898	1903
Walton	Yonge	Elizabeth	Macadam	1902	1905
Wascana	Sumach	186 ft. east	Cedar bl'k.	1891	1896
Washington	Spadina	Huron	Macadam	1899	1904
Wellesley Cres.	Sherbourne	Jarvis	"	1898	1901
Wellesley	Sumach	300 ft east	Cedar bl'k.	1889	1899
Wellesley	Parliament	Sumach	Macadam	1899	1904
Wellesley	Sherbourne	Parliament	Asphalt	1894	1904
Wellington Ave.	Bathurst	East terminus	Cedar bl'k.	1891	1901
Wellington	Church	Yonge	Asphalt	1889	1899
Wellington	Bay	York	"	1891	1899
West Lodge	Merrion Pl	1,146 ft. north	Cedar bl'k.	1899	1904
Westmoreland	Durham	Union	"	1890	1900
Westmoreland	Bloor	Durham	"	1890	1900
Wilkens	King	North terminus	"	1888	1899
Winchester	Parliament	Sumach	Asphalt	1893	1901
Withrow Ave	Broadview	1,060 feet east	Cedar bl'k.	1889	1898
Wilton	Sherbourne	Parliament	Macadam	1901	1906
Wolseley	Esther	Bathurst	Tar macadam.	1900	1905
Wolfrey	Broadview	Bowden	Cedar bl'k.	1888	1899
Wright Ave.	McDonnell	Sorauren	"	1891	1899
Yonge	Grenville	Bloor	Asphalt	1892	1902
Yonge	King	Hayter	"	1892	1902
Yonge	Hayter	Grenville	"	1892	1902
Yorkville	Yonge	Avenue Rd	Cedar bl'k.	1896	1901

TAR MACADAM PAVEMENTS.

This year there were two tar macadam pavements constructed, which together amounted to .247 miles, which is a decrease of 1.01 miles or about 80 per cent. when compared with the 1.257 miles constructed during 1905; of this mileage .055 miles were constructed under the old specifications and the balance under those revised in 1905.

The large decrease in this year's tar macadam furnishes strong evidence of the growing unpopularity of this class of pavement. This adverse opinion in regard to those works laid under the old specifications, is no doubt justified, but with respect to the new class of tar macadam there is good reason for belief that this pavement will be of a durable nature.

In connection with tar macadam pavements there was constructed during the year 1906, 2,389 lineal feet of combined concrete curbing and gutter such as is used in the construction of asphalt pavements. This form of gutter will very probably entirely replace brick, which was formerly used: while the extremely low prices prevail for asphalt pavements which carry a ten-year guarantee, the construction of the more expensive tar macadam will be discouraged as much as possible.

Tables No. 7 and 8 show details.

BITULITHIC.

The first bitulithic pavement laid in Toronto was started in November, 1903, but was not completed until the following year. This pavement was very small, being only .063 miles in length and was merely intended to act as a sample. Since 1903 more bitulithic has been laid: the amount put down during 1904 was 1.528 miles; that laid during 1905 being 1.635 miles, and during 1906 there was a total of 2.759 miles laid. This makes a total at present laid in the City of 5.985 miles of bitulithic. The mileage for 1906 represents a yardage of 40,218 square yards.

The above figures show a pronounced yearly increase in this class of pavement.

The bitulithic pavement carries with it a 10-year guarantee, and while it may still be looked upon in the light of an experiment so far as local knowledge and conditions are concerned, there is every evidence that it will live up to the expectations of the promoters.

The pavement, as originally laid, consisted of a base of broken stone of such depth that when thoroughly rolled and brought to grade, a thickness of 4 inches was obtained. This base was covered with a wearing surface of broken stone, 2 inches in thickness, treated with a patent mixture. Recently several pavements have been put down which provide a 4-inch concrete foundation on which is laid the usual 2-inch wearing surface. This latter class may be considered the better when the question of repairs is approached. In a city such as Toronto, where a pavement of any class is apt to be opened at any time and anywhere for repair or installation of gas or water services and private drains, the question of repairs enters very largely into consideration, and it is an established fact that concrete furnished the most easily repaired of all permanent foundations; it is therefore to be advocated that the bitulithic pavement should be laid on a concrete foundation where the nature of the subsoil will permit.

One of the chief advantages claimed for this pavement is that it provides a safer footing on a slope for horses than asphalt, brick, etc. This principle should not be carried to extremes, a 7.5 or 8 per cent. grade being about the safe outside limit.

In conjunction with bitulithic pavements there was laid during 1906, 19,100 lin. ft. of combined concrete curbing and gutter of the same type as that laid with asphalt pavements.

Tables No. 7 and No. 8 show details.

MACADAM.

During the year there was constructed a total mileage of 1.591 miles of macadam roadway, as compared with 3.373 miles laid in

1905. This represents a decrease of 1.782 miles or more than 50 per cent. It is very gratifying to be able to note this pronounced decline in the construction of macadam roadways which, while being probably the most desirable for country roads, are most unsuitable under the conditions prevailing in large centres. Of the total mileage constructed during 1906, .673 miles was reconstruction of old macadam, and the remaining .918 miles was either first or second class macadam on streets that had not previously been improved. Brick gutters were used where the grade was so steep as to cause the storm water to wash away the surface of the macadam roadway.

It has been determined, in future, not to put down any second or third class macadam roadways, but to construct only those of the first class.

In connection with macadam roadways during 1906, 1,310 lineal feet of stone curb and 13,866 lineal feet of concrete curb was constructed.

Tables Nos. 7 and 8 show details of macadam roadways.

CONCRETE PAVEMENTS.

Two concrete pavements were constructed during 1906, one on Rush Lane, between Esther Street and Portland Street, and one on Court Street Square, around No. 1 Police Station. Under such traffic conditions as exist on these thoroughfares, concrete pavements seem to be very satisfactory, being durable, easily cleaned, and therefore sanitary, and much cheaper than either brick or asphalt The construction of this class of pavement, however, is not to be encouraged for streets which are subjected to very heavy traffic.

In 1906 a mileage of .144 miles was constructed as compared with .055 miles in 1905.

CEMENT CONCRETE WALKS.

During the year 421 concrete sidewalks were constructed, 359 being laid under the Local Improvement system, and the remaining

62 were put down by private contract under the supervision of this Department. The total mileage laid was 43.536 miles. This is an increase of 6.036 miles or 16 per cent. when compared with the mileage laid during 1905, which up to that time held the record for the greatest amount of work done under the supervision of this Department in one year.

Only one brick sidewalk was constructed, with a mileage of .130 miles. The total length of permanent sidewalks constructed during 1906 was 43.666 miles and the total length in the City is now 230.872 miles.

In connection with concrete sidewalks 109,020 lineal feet of concrete curb were constructed during the year.

DAY LABOR WORKS.

During the year 1906, 359 concrete sidewalks were constructed, of which 81 were done by day labor. Of these 20 were ordered by Council to be done by day labor without the formality of calling for tenders, and 3 were undertaken at the request of the Property Commissioner; 2 were taken from contractors at their request on account of dissolution of partnership, and the balance, 56 in number, were awarded to the City Engineer, he being the lowest tenderer. On 24 other walks the City Engineer's tender was also found to be lowest, but at the request of the next lowest tenderer he was allowed to do the work, under the supervision of this Department and at the City Engineer's figures, thus effecting a substantial saving to the property owners. The walks constructed under this system aggregate 6 miles as compared with 9 miles constructed in 1905.

In estimating the gain or loss resulting from the day labor system, if we take the lowest local contractor's tender as a basis of comparison on the walks for which tenders were invited, we find an actual gain of $2,058.15 on an actual expenditure of $19,044.63.

The total cost of sidewalks constructed under the day labor system during 1906, exclusive of interest on money, was $32,803.34

as compared with $42,874.91 in 1905, the total cost of sidewalks done by order of Council and Property Commissioner being $12,923.94.

Table No. 10 gives widths, amount of City's tender, the next lowest tender, the actual cost of the work, and the loss or gain in comparison with contractor's tenders.

During the year we were awarded contracts by tender for the construction of 2 macadam roadways, 1 macadam roadway reconstruction, 1 asphalt block pavement, 5 brick on concrete pavements, 4 granite sett track allowance pavements, and 1 stone curbing. On these works a nett gain of $1,583.09 was effected on an actual expenditure of $16,923.18.

Four granite sett track allowance pavements and 1 brick were left in an incomplete condition, so that no gain or loss can be shown for this year. The actual cost of these incomplete works up to the end of December, 1906, was $32,564.90.

In addition to the above contracts 3 granite sett track allowance pavements, 1 macadam road, 1 brick pavement, and 1 grading were done by order of Council without the formality of calling for tenders. On these 7 pavements a total expenditure of $38,676.68 was incurred, and on account of there being no competitive tenders, no profit can be shown.

$12,345.88 was spent during the year on track allowance reconstruction, $8,935.65 on sundry track repairs (see Table No. 13), and $2,084.80 on repairing the north and west approaches to York Street Bridge.

The total expenditure on pavement work for the year was $123,667.77.

Table No. 11 gives detailed information and statistics on these works.

A reference to Tables No. 10 and No. 11 will show a saving in favor of property abutting on the streets on which sidewalks were constructed by day labor during 1906 of $2,058.15, and a saving due to the construction of pavements and roadways of $1,583.09. In addition we also claim credit for a saving of $1,731 on 24 sidewalk and 14 pavement contracts where our tender was the lowest and which were accepted by the contractor at our figures, said saving being the difference between the City's tender price and the contractors' original tender.

There were 16 concrete curbing contracts also awarded to the City Engineer during the year, he being in nearly every case, the only tenderer, but these were all transferred to other contractors at our figures, as in every case the contractor had a pavement of one kind or another to construct on the same section of the street, and it was deemed advisable to have the curbing and pavement foundation go in together.

The total saving on day labor works completed in 1906 was $5,372.24.

In addition to this profit the Department is justly entitled to the saving on the cost of inspection which is always incurred on contract works, but which is rendered unnecessary on day labor works. Estimated at $3 per day for the time allowed for the construction of day labor works, this saving would amount to $1,923.

If we were to estimate a profit of 10% on all work done by order of Council and on all track allowance repairs and reconstruction (this being the percentage of profit actually gained on the finished work), it would amount to $8,800.

On referring to the various tables in reference to day labor works it will appear that there was considerable falling off in the amount of concrete sidewalk work done this year in comparison to last year, but this falling off is more than offset by the great increase in pavement work done under the day labor system.

During the year a large amount of track allowance pavement was done by day labor, and I would suggest that in future all track allowance work that is to be done on streets that are already permanently paved, be done by day labor; for there is usually a lot of extra work necessary at street intersections and in reconstructing the pavement along the rails, which I think can be done with less trouble and less expense by our own men than by contractors.

It is interesting to note that about 30 per cent. of the sidewalks and 50 per cent. of the pavements done by day labor this year were undertaken on an order of Council.

MAINTENANCE DEPARTMENT.

Following is a statement in brief of the work carried out by the maintenance branch of the Roadways Department for the eleven months ending November 30th, 1906.

MACADAM ROADWAYS.

The undermentioned macadam roadways which were constructed as local improvements have been re-surfaced, at the costs given below. These roadways are now in a creditable condition. However there are a number of old macadam roads throughout the City which are in such a condition that would not warrant re-surfacing; these roads have been repaired from time to time as the occasion demanded.

The cost of the work done on pavements that have been re-surfaced is as follows:

Front Street, Trinity to Cherry Street	$320 88
Simcoe Street, Wellington to King	194 27
Strachan Avenue, G. T. R. to south end	214 13
Marlborough Place, Avenue Road to 646 ft. east	301 28
Crescent Road, Yonge to South Drive	793 05
Cherry Street, Front to 1,392 feet south	233 11
University Avenue, Queen to Anderson Street (treated with Westrumite)	1,511 23
University Avenue, Anderson to College Street	1,442 27
South Drive, Crescent to Glen Road	252 64

Street	From	To	Contractor	Asphalt used	Bitumen in Surface Mixture.	Penetration of Asphaltic Cement. Dow's Machine.	Refined Asphalt: Physical Examination: Specific Gravity	Refined Asphalt: Physical Examination: Flowing Point	Refined Asphalt: Chemical Analysis: Bitumen: Petroleum.	Refined Asphalt: Chemical Analysis: Bitumen: Asphaltine	Refined Asphalt: Chemical Analysis: Non-bituminous Organic matter.	Refined Asphalt: Chemical Analysis: Inorganic matter	Sand Grading: On No. 10 Sieve.	Sand Grading: Pass No. 10 Sieve	Sand Grading: Pass No. 20 Sieve	Sand Grading: Pass No. 30 Sieve	Sand Grading: Pass No. 40 Sieve	Sand Grading: Pass No. 50 Sieve	Sand Grading: Pass No. 80 Sieve	Sand Grading: Pass No. 100 Sieve.	Sand Grading: Pass No. 200 Sieve.	Dust Grading: On No. 50 Sieve.	Dust Grading: Pass No. 50 Sieve.	Dust Grading: Pass No. 80 Sieve.	Dust Grading: Pass No. 100 Sieve.	Dust Grading: Pass No. 200 Sieve.
									%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Adelaide St.	Bay St	York St	Constructing and Paving Co.		11.37	88°							0.0	0.5	0.5	3.0	5.5	32.5	20.0	27.5	10.5	2.0	2.0	12.0	36.0	18.0
Alexander St	Yonge St	Church St	Barber Asphalt Co.	Trinidad "Pitch Lake"	10.11	36°	1.216	205°F	51.3	31.2	3.8	14.7	0.5	1.0	0.5	5.0	9.0	41.0	8.5	20.0	14.5	2.0	2.0	2.0	26.0	68.0
Bain Ave.	Broadview Ave	580 ft. east	"	"									0.5	1.0	1.0	4.0	7.5	42.5	13.5	20.5	9.5	0.0	0.0	6.0	2.0	92.0
Bay St	Queen St	King St	Gibson Contracting Co.	Cuban and Californian "Grade D"	10.13	50°							1.0	6.5	5.0	9.0	7.5	27.0	11.0	16.0	17.0	0.0	0.0	4.0	4.0	88.0
Beatrice St	400 ft. n. of Arthur St	675 ft. further north	"	Californian "Grade D"	11.25	50°							0.0	2.5	4.0	12.5	14.0	34.5	9.0	15.0	11.5	2.0	2.0	8.0	16.0	72.0
Bernard Ave	St. George St	Spadina Ave	Barber Asphalt Co.	Trinidad "Pitch Lake"	11.07	40°							0.5	1.0	1.0	4.0	7.5	42.5	13.5	20.5	9.5	0.0	0.0	6.0	2.0	92.0
Birch Ave	Yonge St	West end	Constructing and Paving Co.	"	10.18	40°							0.0	1.0	1.0	5.0	7.0	33.5	14.5	23.0	15.0	0.0	0.0	2.0	2.0	98.0
Bertie Ave	Dundas St	West end	Barber Asphalt Co.	Trinidad "Pitch Lake"	9.98	38°	1.202	203°F	49.3	37.2	2.9	10.6	1.0	2.0	2.0	8.5	13.5	43.0	9.5	12.0	8.5	2.0	4.0	6.0	10.0	78.0
Bloor St	Lansdowne Ave	Dundas St	"	"	11.03	46°							0.0	2.5	2.5	11.0	15.0	39.5	8.5	12.5	9.0	2.3	2.0	4.0	8.0	84.0
Broadview Ave	Queen St	Gerrard St	"	"	10.65	40°							0.5	1.0	1.0	4.0	7.5	42.5	13.5	20.5	9.5	0.0	0.0	6.0	2.0	92.0
Broadview Ave	Gerrard St	Danforth Ave	Constructing and Paving Co.	"	10.50	81°							0.0	1.0	2.0	8.5	9.0	37.0	14.0	18.0	10.5	2.0	2.0	10.0	30.0	56.0
Delaware Ave.	Bloor St.	Shanley Ave	"	"	11.44	38°							0.0	1.0	2.5	11.0	12.0	37.0	10.5	16.0	10.0	0.0	2.0	8.0	6.0	84.0
Delaware Ave.	College St	Dawson St	Barber Asphalt Co.	Trinidad "Pitch Lake"	10.35								1.0	1.0	1.0	8.5	9.5	40.0	11.0	17.5	10.5	0.0	4.0	6.0	10.0	80.0
Dovercourt Rd	Bloor St	City limits	"	"	10.54	38°							0.5	1.0	2.0	8.5	11.0	45.0	10.5	15.0	6.5	0.0	4.0	6.0	10.0	80.0
Empress Cres	Jameson Ave	Dowling Ave	Constructing and Paving Co.		9.08	31°							0.0	1.0	2.5	8.0	11.5	47.5	10.5	11.0	5.0	0.0	2.0	6.0	24.0	68.0
Euclid Ave	Bloor St	Follis Ave	"	"	10.26	31°							0.5	2.0	2.5	10.0	11.0	36.5	12.0	16.0	9.5	4.0	4.0	2.0	4.0	86.0
Grace St	Arthur St	College St	Barber Asphalt Co.	Trinidad "Pitch Lake"	11.58	62°	1.368	225°F	39.3	30.3	5.3	25.1	1.0	1.0	1.0	8.5	9.5	40.0	11.0	17.5	10.5	0.0	4.0	6.0	10.0	80.0
Hackney St.	Wolsley St	St. Patrick St.	"	"	9.73	38°							1.5	2.0	1.5	7.5	10.0	35.0	10.0	19.0	13.5	2.0	2.0	6.0	14.0	76.0
Hallam St	Dovercourt Rd.	Dufferin St	"	"	11.32	39°	1.383	230°F	39.2	25.8	6.1	28.9	1.0	2.5	1.0	6.0	8.0	40.5	12.0	15.0	14.0	0.0	4.0	6.0	8.0	84.0
Hayter St	Yonge St.	Chestnut St	"	"	11.40	49°							0.0	0.5	1.0	7.0	11.5	47.0	10.5	13.5	9.0	0.0	0.0	6.0	2.0	92.0
Hepbourne St	Ossington Ave	Dovercourt Rd	"	"	10.95	43°							0.5	1.0	1.0	4.0	7.5	42.5	13.5	20.5	9.5	0.0	0.0	6.0	2.0	92.0
Howard Ave	Queen St	Eastern Ave	"	"	10.84								0.0	2.0	2.5	11.0	15.0	39.5	8.5	12.5	9.0	2.0	2.0	1.0	8.0	84.0
Jarvis St.	Queen St	Bloor St	Constructing and Paving Co.		10.00	35°							0.5	2.5	3.5	10.2	11.5	36.7	12.3	12.5	10.5	0.7	3.3	8.0	16.7	71.3
John St	King St	Queen St	Barber Asphalt Co.	Trinidad "Pitch Lake"	11.51	52°							1.0	1.0	1.0	8.5	9.5	40.0	11.0	17.0	10.5	0.0	4.0	6.0	10.0	80.0
Lobb Ave	Crawford St	Shaw St	"	"	10.00								0.5	1.0	1.0	4.0	7.5	42.5	13.5	20.5	9.5	0.0	0.0	6.0	2.0	92.0
Mulock Ave	Church St	East end	"	"	11.64	52°							0.5	1.0	1.0	4.0	7.5	42.5	13.5	20.5	9.5	0.0	0.0	6.0	2.0	92.0
Northcote Ave.	Queen St	Alton Ave	"	"	9.81	33°	1.202	203°F	49.3	37.2	2.9	10.6	1.0	2.0	2.0	8.5	13.5	43.0	9.5	12.0	8.5	2.0	4.0	6.0	10.0	78.0
Prospect Ave	Ontario St	Rose Ave.	"	"	10.77	36°	1.190	208°F	55.7	31.8	3.0	9.5	0.5	1.0	0.5	5.0	9.0	41.0	8.5	20.0	14.5	2.0	2.0	2.0	26.0	68.0
Queen St	Yonge St	River St	"	"	10.16	47°	1.256	211°F	48.7	29.5	4.6	17.2	1.2	2.7	2.3	9.8	11.7	38.5	11.0	12.1	10.7	0.0	0.7	1.7	4.3	93.3
Queen St	Niagara St	Gladstone Ave	Constructing and Paving Co.		10.38	81°							0.0	1.0	2.0	8.5	9.0	37.0	14.0	18.0	10.5	2.0	2.0	10.0	30.0	56.0
Richmond St	Jarvis St	Church St	Barber Asphalt Co.	Trinidad "Pitch Lake"	9.56	46°							4.5	2.0	1.5	7.5	10.0	41.0	9.0	13.5	11.0	0.0	4.0	4.0	12.0	80.0
Rusholme Rd	Hepbourne St.	Bloor St	"	"	10.15	33°	1.202	203°F	49.3	37.2	2.9	10.6	1.0	2.0	2.0	8.5	13.5	43.0	9.5	12.0	8.5	2.0	4.0	6.0	10.0	78.0
Taylor St	Sumach St.	River St	"	"	11.16	49°							0.0	0.5	1.0	7.0	11.5	47.0	10.5	13.5	9.0	0.0	0.0	6.0	2.0	92.0
Walmer Rd.	Bloor St	Castle Ave	"	"	9.52	43°							0.5	1.0	1.0	4.0	7.5	42.5	13.5	20.5	9.5	0.0	0.0	6.0	2.0	92.0
Wellington St	Simcoe St	Peter St	"	"	10.55	48°							0.5	1.0	1.0	4.0	7.5	42.5	13.5	20.5	9.5	0.0	0.0	6.0	2.0	92.0
Westmoreland Ave	Bloor St	VanHorne St	Constructing and Paving Co.		9.64	29°							0.5	2.0	3.5	12.2	12.0	42.0	10.0	12.8	5.0	0.0	0.0	2.0	18.0	80.0
Yonge St	King St	Queen St	Barber Asphalt Co.	Trinidad "Pitch Lake"	10.59	42°	1.183	212°F	52.4	29.8	4.2	13.6	1.5	2.5	1.7	7.3	9.2	41.3	8.7	16.3	11.5	2.0	3.0	5.0	14.0	76.0
Yonge St.	Queen St	n. s. of College St	"	"	10.17	48°	1.256	211°F	48.7	29.5	4.6	17.2	1.0	2.0	2.0	10.5	11.0	37.0	10.5	14.0	12.0	0.0	2.0	1.0	1.0	96.0
Yonge St.	College St. n.s.	Bloor St	Constructing and Paving Co.		10.08	41°							0.0	2.0	5.6	15.5	14.0	39.0	10.0	8.0	6.5	2.0	1.0	4.0	13.0	80.0
Repairs			Barber Asphalt Co.	Trinidad "Pitch Lake"	9.45	34°							0.4	2.3	3.6	10.1	11.0	39.1	12.8	16.1	4.6	0.4	1.2	2.4	16.0	80.0
			Warren Bitulithic Co.	Californian "Warren's Acme"	9.14	52°							0.5	1.0	0.5	5.0	9.0	41.0	8.5	20.0	14.5	2.0	2.0	2.0	26.0	68.0
				Trinidad "Pitch Lake"	8.63	79°			80.8	18.4	0.6	0.2	0.0	2.0	5.5	6.5	7.7	54.0	8.0	12.3	3.5	0.0	2.0	4.0	14.0	81.0
Note—The Constructing and Paving Co. used the following asphalts in varying proportions				Trinidad "Pitch Lake"			1.371	230°F	39.1	22.7	8.0	30.2														
				Californian					68.6	30.3	0.7	0.4														
				Texan					65.7	33.9	0.2	0.2														
				Bermudez					61.5	34.3	1.2	3.0														
Note—The Gobson Co. used a mixture of Californian "Grade D" and Cuban asphalts in the proportion of 4 to 1 on Bay Street				Californian "Grade D"					70.8	28.9	0.2	0.1														
				Cuban			1.379	293°F	31.8	34.3	3.7	30.2														
					445 Tests.	68 Tests.							34 Tests.									32 Tests.				

Macpherson Avenue, Yonge to 629 feet east Avenue Road ...	804 80
Queen Street, Roncesvalles to G. T. R.	629 80
Elm Grove, King to Queen Street	107 25
	$6,804 71

The cost of this re-surfacing during the season of 1906 was $6,804.71, while the expenditure for a like service during 1905 was $2,029.45.

The undermentioned is a list of those macadam roads which were repaired and patched to keep in a safe state for traffic, but did not warrant re-surfacing.

John Street, Kingston Road, Queen Street East, Cherry Street, Munro Street, Huron Street, DeGrassi Street, First Avenue, Logan Avenue, Simpson Avenue, Division Street, Brooklyn Avenue, Sumach Street, Carlton Street, Pembroke Street, Montrose Avenue, Shuter Street, Powell Avenue, Wellesley Crescent, South Drive, Givens Street, Crescent Road, Parliament Street, Nanton Avenue, River Street, Robinson Street, Wilton Avenue, Glen Road, Eastern Avenue, Albert Street, Bond Street, Wellington Street, Mutual Street, Richmond Street, Temperance Street, Victoria Street, Farley Avenue, St. Vincent Street, Irwin Avenue, Cumberland Street, Beverley Street, Duncan Street, Anderson Street, Caer Howell Street, Grange Road, Spadina Avenue, Niagara Street, Wellington Place, Portland Street, Brant Street, Adelaide Street, Bathurst Street, Approach to Brock Street Bridge, Washington Avenue.

GENERAL ROAD REPAIRS.

The different classes of pavements throughout the City such as stone, brick, cedar block, asphalt, gravel, macadam, and unpaved streets, etc., etc., have all received attention from time to time to keep them in a fit state for traffic.

GRADING.

The following streets were turnpiked and graded :—
Radcliffe Avenue, Queen to Eastern Avenue.
Dagmar Avenue, Pape to Jones Avenue.

Doel Avenue, Jones to Leslie Street.
Hazelwood Avenue, Pape to Leslie Street.
Natalie Street, Carlaw Avenue to west end.
Crawford Street extension.
Jefferson Avenue, Liberty Street to 188 ft. south.
Oak Street, Sumach to River Street.
Balmoral Avenue, Avenue Road to Poplar Plains Road.
Jersey Avenue extension.
Montrose Avenue, Bloor Street to 1,000 ft. south.
Barrett Avenue, Conduit Street to 265 ft. south.
Wolfrey Avenue, extension.
George Street, railway tracks to the Bay.
Lee Avenue, Queen Street to the Lake.
Eastern Avenue, G. T. R. to Queen Street.
Greenwoods Avenue, Queen Street to the G. T R.

PLANK SIDEWALK EXTENSIONS.

At the request of property owners and others, plank sidewalk extensions and private crossings have been constructed by this Department, for which there has been received and paid to the City Treasurer the sum of $348.63.

The amount received on miscellaneous accounts and paid to the City Treasurer was $234 62.

STREET OPENING PERMITS.

The number of permits issued to builders, excavators, and others who were desirous of temporarily removing portions of plank sidewalks was 3, the usual deposit of $10 being exacted in each case as a guarantee that the sidewalk would be properly restored.

STREET NUMBERING.

The large number of new houses which have been erected in the City of Toronto during the current year, together with the renumbering of certain streets, necessitated the placing of 10,365 figures on dwellings, stores, etc. There have also been erected at street intersections throughout the City 2,112 enamelled street signs.

The amount that Council saw fit to appropriate for this service, viz., $2,000, was not sufficient to renumber all of the streets contained in your recommendation. The following streets have been renumbered during the current year:—Brunswick Avenue, Collier Street, Gilead Place, Chicora Avenue, Pears Avenue, Kew Beach Avenue.

PLANK SIDEWALKS.

The annexed table is a list of all local improvement plank sidewalks constructed during the year:—

LIST OF PLANK SIDEWALKS CONSTRUCTED AS LOCAL IMPROVEMENTS BY THE CITY ENGINEER'S DEPARTMENT DURING YEAR 1906.

Street.	Side.	From.	To.	Width.	Length.	Lumber.	Nails.	Total Cost.
				Feet.	Feet.	Feet.	Lbs.	$ c.
Division No. 1:								
Jones Ave.....	W..	622½ ft. n. of Queen..	372 ft. further n.	5⅓	313	4,594	150	154 63
Division No. 5:								
Montrose Ave ..	W..	1,050 ft. s. of Bloor..	240 ft. further s.....	5⅓	240	3,520	125	100 22
Melville Ave....	S ..	Shaw	616 ft. e.....	5⅓	639	9,788	300	307 95
Gore Vale Ave..	E ..	520 ft. s. of Arthur ..	Queen	4	1,340	14,406	500	403 78
Crawford	W..	300 ft. n. of Bloor....	363 further n	5½	363	5,324	200	151 05
Barton Ave	S ..	Manning	Christie	4	611	6,518	200	189 65
Pendrith	S ..	Christie	500 ft. w.....	5⅓	460	7,378	250	208 88
Van Horne	S .	Ossington.....	Dovercourt	4	895	10,215	350	286 20
Crawford	W..	Bloor	300 ft. n.....	4	305	3,254	150	95 53
Carling Ave	E ..	Bloor	284½ ft. n.....	5⅓	287	4,209	150	109 33
Division No. 6:								
Irving Ave	N .	Perth	Franklin.....	5⅓	430	6,307	200	174 11
Irving Ave	S ..	Perth	Franklin.....	5⅓	430	6,307	200	185 09
Symington	W..	Royce	800 ft. s.....	5⅓	805	13,911	300	348 10

WOOD CROSSINGS.

The wood crossings throughout the City have received careful attention to maintain them in a safe condition for traffic.

During the season 1906 there were 118 new wood crossings constructed by this Department, as against 76 crossings in the year 1905.

PERMANENT CROSSINGS.

Twenty-one (21) permanent crossings were constructed by this Department during the past eleven months, as against nine (9) during the season of 1905. These crossings were built of scoria, stone, and brick, and constitute a clean and durable class of crossing.

LAKE SHORE ROAD RETAINING WALL.

During the current year a rubble stone breakwater was constructed on the Lake Shore Road. During the fall and winter of 1904-5 the action of the waves undermined the sidewalk and cut away the roadway opposite High Park on the Lake Shore Road, for a distance of 1,200 feet, and during the low water season of 1906 a hand laid rubble breakwater was constructed upon a brush mattress and back filled, so as to provide a firm foundation for the plank sidewalk which had been rendered unsafe for traffic. This work was done at a cost of $2,500, and the only result of the action of the waves during this fall has been to form a sand beach extending from the foot of the breakwater for some distance towards the lake.

PUBLIC CONVENIENCES.

The public conveniences throughout the City have been visited by the district inspectors with a view to maintaining them in as sanitary a condition as is possible. I beg to report the necessity of constructing a new lavatory at the corner of Queen and Dundas Streets, as this lavatory is in a worn out and unsanitary state. Many complaints have been received in reference to this public convenience, and I recommend that money be provided in next year's Estimates for the construction of a new lavatory at this corner.

EXPRESS AND CABMEN'S SHELTERS.

During the past year the express stand on Richmond Street East was shifted, under orders from your Committee, four of the

waggons going to the Lombard Street stand, and the others to the stand in rear of the Post Office. Owing to the construction of the Street Railway loops on Richmond Street, between Yonge and Bay Streets, it will be necessary to provide another suitable site for the location of the express stand on Richmond Street, west of Yonge Street.

SNOW REMOVAL—SIDEWALKS.

Ward. No.	Division.	Feet Cleaned. Feet.	Cost. $ c.
1	1	21,378	98 75
	2	35,567	156 50
2	1	5,818	25 80
	2	26,280	115 63
3	1	7,793	34 26
	2	1,740	7 68
	3	14,907	65 70
4	1	6,828	29 99
	2	11,633	51 20
	3	35,542	156 36
5	1	12,594	55 40
	2	79,494	349 60
	3	46,179	203 40
6	1	64,247	283 05
	2	56,620	249 26
	3	46,472	204 85
		473,092	$2,087 43

During the winter 1905-6, which was a comparatively mild one, snow was removed from 473,092 lineal feet of sidewalk or 89 miles, 3172 feet, as against 2.27364 lineal feet during the winter of 1904-5.

The cost of removing this snow was assessed against the property fronting which the sidewalks were cleaned, the rate being four and four-tenth mills, and the total cost $2,087.43.

CITY WHARF ROADWAY.

By order of City Council a new roadway was constructed by this Department at the new freight sheds, foot of Bay Street, on Block D, from Lake Street to the south end, at a cost of $1,090.94.

STREET EXTENSIONS AND OPENINGS.

By order of City Council the following streets were opened up, straightened, or extended by this Department:

Manning Avenue, Queen to Robinson Street.
Jersey Avenue, Evans Avenue to lane north.
Wolfrey Avenue, Broadview to Logan Avenue.
Lane, from Duchess to Ontario Streets.

HOUSE OF INDUSTRY STONE.

During the season 1905-6 the casual inmates of this institution broke approximately 2,064 cubic yards of stone, as against 720 cubic yards during the season 1904-5. This is a reasonable indication of the amount of work carried out by this department during the past season.

Respectfully submitted,

M. A. STEWART,
Assistant Engineer.

TABLE No. 7.

Asphalt Pavements.

Street	From.	To.	Width Lin ft.	Length Lin. ft.
Adelaide	Bay	York	42	842
Alexander	Yonge	Church	27	937
Beatrice	400 ft. n. Arthur	675 ft. further north	24	675
Bernard	St. George	Spadina	24	869
Birch	Yonge	West end	21	1,326
Bay	King	Queen	42	1,176
Broadview	Queen	Gerrard	28	2,480
Birtle	Dundas	430 ft. west	24	430
Birtle	430 ft. w. of Dundas	West end	24	251
Bloor	Lansdowne	Dundas	30	2,643
Delaware	College	Dewson	24	910
Dovercourt Rd	Bloor	North City limit	27½	3,369
Delaware	Bloor	Shanley	24	1,119
Empress Crescent	Jameson	Dowling	21	825
Euclid	Bloor	Follis	24	1,633
Grace	Arthur	College	24	1,542
Hackney	Wolseley	St. Patrick	20	1,207
Hallam	Dovercourt	Dufferin	24	1,577
Hepbourne	Ossington	Dovercourt	24	899
Jarvis	Queen	Bloor	36	6,722
John	King	Queen	26	1,016
Lobb	Crawford	Shaw	24	252
Mulock	Church	East end	17	348
Northcote	Queen	Afton	24	1,496
Prospect	Ontario	Rose	21	292
Queen	Yonge	River	28	6,083
Queen	Niagara	Gladstone	28	4,658
Rusholme	Hepbourne	Bloor	21	759
Richmond	Jarvis	Church	42	628
Walmer Rd	Bloor	Castle	24	1,363
Wellington	Simcoe	Peter	32	1,660
Yonge	King	Queen	28	1,174
Yonge	Queen	North side College	28	3,417
Yonge	North side College	Bloor	28	3,302
Taylor	Sumach	River	17	580
Heward	Queen	Eastern	24	955
Hayter	Yonge	Chestnut	24	1,336
Bain	Broadview	500 ft. east	24	500
				61,251

Asphalt Block.

Millstone Lane	York	East end	19	317

TABLE No. 7.

Asphalt Pavements.

Pavement Sq. Yds.	Curb. Width Lin. Inch.	Curb. Length. Lin. Ft.	Curb. Class.	Completed.	Contractor.
3,971	6	30	Concrete	Oct. 31, 1906	Constructing & Pav. Co.
2,997	5	2,026	"	May 15, 1906	Barber Asphalt Pav. Co.
1,805	6	1,350	"	Oct. 15, 1906	Godson Contracting Co.
2,354	.....	.....	.....	Aug. 13, 1906	Barber Asphalt Pav. Co.
3,145	6	2,662	Concrete	Aug. 17, 1906	Constructing & Pav. Co.
5,922	.....	.....	.....	July 24, 1906	Godson Contracting Co.
8,087	6	4,988	Concrete	Aug. 16, 1906	Barber Asphalt Pav. Co.
1,203	.....	.....	.....	June 7, 1906	" " "
652	6	486	Concrete	June 6, 1906	" " "
8,814	6	5,111	"	Dec 1, 1906	" " "
2,426	6	133	"	Oct. 24, 1906	" " "
10,349	6	6,667	"	Oct. 3, 1906	" " "
3,088	6	2,261	"	Sept. 27, 1906	Constructing & Pav. Co.
1,898	5	1,658	"	June 28, 1906	" "
4,687	5	3,556	"	July 19, 1906	" "
4,267	6	60	"	Oct. 29, 1906	Barber Asphalt Pav. Co.
2,845	6	2,456	"	May 23, 1906	" " "
4,611	6	3,174	"	Oct. 5, 1906	" " "
2,527	.....	.....	.....	Sept. 14, 1906	" " "
29,195	.....	.....	.....	Sept. 25, 1906	Constructing & Pav. Co.
3,690	.....	.....	.....	Nov. 7, 1906	Barber Asphalt Pav. Co.
698	6	522	Concrete	Sept. 22, 1906	" " "
691	5	696	"	Nov. 16, 1906	" " "
4,198	6	3,057	"	June 15, 1906	" " "
689	.....	.....	.....	May 11, 1906	" " "
18,610	.....	.....	.....	Aug. 4, 1906	" " "
14,817	.....	.....	.....	Nov. 24, 1906	Constructing & Pav. Co.
1,770	6	1,518	Concrete	June 5, 1906	Barber Asphalt Pav. Co.
2,920	6	1,270	"	June 23, 1906	" " "
5,125	6	360	"	Sept. 12, 1906	" " "
6,113	6	3,331	"	Sept. 5, 1906	" " "
4,074	.....	.....	.....	May 31, 1906	" " "
11,540	.....	.....	.....	July 18, 1906	" " "
11,190	.....	.....	.....	Oct. 17, 1906	Constructing & Pav. Co.
1,120	.....	.....	.....	Dec. 5, 1906	Barber Asphalt Pav. Co.
3,150	.....	.....	.....	Nov. 26, 1906	" " "
3,980	.....	.....	.....	Nov. 29, 1906	" " "
1,317	6	1,000	Concrete	Nov. 17, 1906	" " "
200,445		48,375			

Asphalt Block.

587	6	634	Concrete	June 16, 1906	Day Labor.

Brick Pavements.

Street.	From.	To.	Width. Lin. Ft.	Length. Lin. Ft.
Argyle	Dundas	Dovercourt Rd	24	993
Charlotte	King	Adelaide	24	427
Fraser	Liberty	133 ft. south	24	133
Gerrard	Pape Ave.	Leslie	26 6	1,978
Lane 1st w. Simcoe	Nelson	Richmond	12	193
Morrison	Adelaide	South End	21	207
Pearl	Simcoe	Duncan	24	512
Wellington	Bathurst	314 ft. 5 in. east	20	314.5
				4,757.5

Vitrified Block.

Kintyre	Broadview Ave	Grant	18	318
Royce	Lansdowne Ave	Track	24	2,868
				3,186

Bithulithic Pavement.

Argyle	Dovercourt	Gladstone Ave	24	1,170
Concord Ave	Northumberland	712 ft. north	24	712
Cottingham	Avenue Rd	617 ft. east	24	617
Cassimir	St. Patrick	193 ft. north	20	193
Dufferin	King	1,758¾ ft. south	26	1,759
Defoe	Macdonell Sq	Niagara	24	964
Farnham Ave	Avenue Rd	East City limits	24	630
Gibson Ave	Yonge	West End	21	459
Howie Ave	Clark	North End	21	469
McMaster Ave	Avenue Rd	Rathnally	21	631
Ossington Ave	Dundas	College	28	1,845
Olive	Palmerston	Manning	24	593
Palmerston	Follis	North City limits	24	1,453
Park Rd	Bloor	Collier	24	573
Scarth Rd	Crescent Rd	Roxboro	21	285
Laurier Ave	Wellesley	North End	18	266
Glen Rd	Elm Ave	251 ft.n South Drive	22 6	905
Ontario	Wilton Ave	Gerrard	24	1,043
				14,567

Brick Pavements.

Pavement Sq. Yds.	Curb. Width. Lin. Inch.	Curb. Length. Lin. Ft.	Curb. Class.	Completed.	Contractor.
2,753	.....	.....	.....	July 25, 1906	J. F. Connolly.
1,192	6	867	Concrete	Aug. 17, 1906	Day labor.
255	6	266	"	Aug. 1, 1906	J. H. McKnight.
5,071	.....	.....	.....	Not compl't'd	Day labor
259	6	346	Concrete	Aug. 31, 1906	" "
483	6	414	"	Sept. 10, 1906	" "
1,372	6	1,038	"	June 5, 1906	" "
698	6	639	"	July 14, 1906	J. H. McKnight.
12,083		3,570			

Vitrified Block.

638	6	638	Concrete	Aug. 28, 1906	J. Maguire.
7,326	6	5,736	"	.....	Day labor.
7,964		6,374			

Bitulithic Pavement.

3,368	6	2,556	Concrete	Aug. 15, 1906	Warren Bit. Paving Co.
2,181	6	1,578	"	Sept. 7, 1906	" " " "
1,701	6	1,234	"	Oct. 3, 1906	" " " "
471	6	450	"	Sept. 6, 1906	" " " "
5,147	6	3,495	"	Aug. 4, 1905	" " " "
2,574	.....	.....	.....	Aug. 10, 1906	" " " "
1,675	.....	.....	.....	Aug. 21, 1906	" " " "
978	.....	.....	.....	Oct. 4, 1906	" " " "
1,091	6	936	Concrete	Sept. 10, 1906	" " " "
1,476	.....	.....	.....	Aug. 23, 1906	" " " "
5,866	6	3,664	Concrete	July 28, 1906	" " " "
1,580	6	1,186	"	Sept. 25, 1906	" " " "
4,214	6	3,011	"	Sept. 21, 1906	" " " "
1,650	.....	.....	.....	Aug. 17, 1906	" " " "
665	5	435	Concrete	May 5, 1906	" " " "
561	6	554	"	Oct. 15, 1906	" " " "
2,242	.....	.....	.....	.....	" " " "
2,778	.....	.....	.....	Dec. 5, 1906	" " " "
40,218		19,099			

Macadam.

Street.	From.	To.	Width. Lin. ft.	Length. Lin. ft.
Curzon	Queen	578 ft. north	24	587
Chestnut Park Rd	Roxboro	north and east	21	655
Ossington	Bloor	C. P. R	24	3,364
Wellesley	Sumach	243 ft. east	24	243
Davenport Rd	635 w. Avenue Rd.	Dupont	24	1,050
John	Queen	Grange	24	794
Park Rd	Collier	South Drive	24	1,710
				18,403

Tar Macadam.

St. Clarens	Dundas	Wyndham	21	1,015
South Ave	Tiverton and West	Avenues	21	290
				1,305

Cedar Block on Sand.

Bloor	Bathurst	Dufferin	28	6,601
Shirley	Brock	St. Clarens	21	604
St. Clarens	College	Dundas	21	408
				7,613

Concrete Pavements.

Rush Lane	Portland	Esther	13	411
Court St. Sq	All around		17	352
				763

Macadam.

Pavements Sq. yds.	Curb. Width. Lin. In.	Curb. Length. Lin. Ft.	Curb. Class.	Completed.	Contractor.
1,565	6	1,174	Concrete	Oct. 14, 1906	Day labor.
1,528	4	1,310	Stone ..	June 9, 1906	" "
9,436	5	6,800	Concrete	Dec. 1, 1906	Godson Contracting Co.
711	6	494	"	July 30, 1906	Day labor.
2,919	5	2,078	"	Oct. 27, 1906	Godson Contracting Co.
2,391	.....	.....	.....	Oct. 2, 1906	Day labor.
4,913	6	3,320	Concrete	.. ..	Constructing and Pav. Co.
23,463		15,176			

Tar Macadam.

2,351	6	1,974	Concrete	Sept. 6, 1906	Godson Contracting Co.
732	5	415	"	July 26, 1906	" "
3,083		2,389			

Cedar Block on Sand.

21,121	6	12,858	Concrete	Aug. 4, 1906	Constructing & Pav. Co.
1,476	5	1,254	"	Aug. 29, 1906	" "
1,004	5	920	"	July 16, 1906	" "
23,601		15,032			

Concrete Pavements.

562	6	439	Concrete	June 8, 1906	Ontario Con. & Pav. Co.
669	5	614	"	Aug. 3, 1906	Constructing & Pav. Co.
1,231		1,053			

Granite Block Track Allowance.

Street.	From.	To.	Width. Lin. ft.	Length. Lin. ft.
Dupont	Bathurst	Christie	15 2	1,918
Dupont	Walmer	Bathurst	15 2	1,634
Gerrard	Leslie	Greenwood	15 2	1,396
Gerrard	Pape	Leslie	15 2	1,977
Lansdowne	College	Bloor	15 2	2,850
Richmond	York	Victoria	15 2	1,925
Scott	Front	Wellington	4 11	299
Victoria	Richmond	Queen	15 2	298
Wellington	Scott	Yonge	4 11	298
Lansdowne and College			15 2	117
Avenue Rd	52 ft. from n. end of rail.	685 ft. further n.	15 2	685
				13,397

Vitrified Block Track Allowance.

Avenue Rd	End of rails	Clinton	15 2	1,736
Dovercourt	Bloor	Van Horne	15 2	3,390
				5,126

Track Allowance Reconstruction.

Dundas	Queen	Arthur	3 5	1,880
Avenue Rd	Bloor	Davenport	14	2,289
McCaul	Queen	College	3 5	3,376
Queen	Yonge	Church	9 10	901
Spadina	Queen	College	6	3,380
Dundas	Bridge	Bridge	9 10	337
				12,163

Grading.

Grace	994 ft. n. of College	500 ft. further n.	35	500

GRANITE BLOCK TRACK ALLOWANCE.

Pavements. Sq. yds.	Curb. Width. Lin. In.	Curb. Length. Lin. Ft.	Curb. Class.	Completed.	Contractor.
3,518				Sept. 20, 1906	Godson Contracting Co.
2,970				Aug. 1, 1906	Day labor.
2,357				Aug. 18, 1906	"
3,339				July 18, 1906	"
4,879				Nov. 16, 1906	Godson Contracting Co.
3,251					Day labor.
164					"
504					"
163					"
226				Dec. 31, 1906	"
1,066				Dec. 27, 1906	Godson Contracting Co.
22,437					

VITRIFIED BLOCK TRACK ALLOWANCE.

2,991				Dec. 27, 1906	Godson Contracting Co.
5,202				June 29, 1906	J. H. Connolly.
8,193					

TRACK ALLOWANCE RECONSTRUCTION.

731					Day labor.
3,561					"
1,313					"
984					"
2,253					"
368					"
9,210					

GRADING.

Cu. Yds.					
2,000				Nov. 7, 1906	Day labor.

Concrete Curbs.

Street.	From.	To.	Side.
Birtle	Dundas	Pt. 454 ft. west	South
Berkeley	King	Front	West
Berkeley	King	Esplanade	East
Denison	Queen	Bellevue Pl.	West
Glen Rd	South Drive	Bridge	East
Glen Rd	Elm Ave.	Bridge	West
Gibson	Yonge	West End	North
Hayter	Yonge	Chestnut	North
Hayter	Teraulay	La Plante	South
Hepbourne	Ossington	Dovercourt	South
John	King	Adelaide	West
John	Queen	187 ft. n. of King	East
McMurrich	Davenport	Belmont	East
McMaster	Avenue Rd.	Pt. 316 7-12 ft. w	North
Parkview	175 ft. n. of Wellesley	63 ft. further n.	West
Park Rd.	Bloor	Collier	West
Park Rd.	Bismark	Collier	East
Queen	Abell	Gladstone	South
Queen	45 ft. w. of Strachan	50 ft. e. of Dovercourt	South
Taylor	Sumach	River	North
Walmer Rd.	Bloor	Lowther	East
Walmer Rd.	Bloor	Lowther	West

Stone Curb.

John	Queen	Grange Road	East

Private Concrete Sidewalks.

No.	Street.	From.	To.	Side.	Width.
					Ft. In.
1	Arthur	Opp. Nos. 24, 30, 32	34	North	6
2	Ancroft Pl.	Sherbourne	East end	South	4
3	Binscarth Rd	Opp. No. 122		North	4
4	Broadview	Simpson	831 ft. south	East	6
5	Bean	South Drive	Point south	West	5
6	Bloor	Bathurst	Point west	South	10
7	Blevins	Opp. Nos. 1, 3, 5, 7		South	3

Concrete Curbs.

Width.	Length.	Completed.	Contractor.
inches.			
6	476	June 6, 1906	Barber Asphalt Pav. Co.
6	310	Nov. 13, 1906	The Grant Con. Co.
6	655	Nov. 6, 1906	"
6	1,726.6	Nov. 10, 1906	A. Gardner & Co.
6	279.5	Nov. 6, 1906	Warren Bit. Pav. Co.
6	841.5	Nov. 6, 1906	"
6	367	July 27, 1906	Godson Con. Co.
6	1,241.4	Nov. 17, 1906	Barber Asphalt Pav. Co.
6	191	Nov. 17, 1906	"
6	872.3	Aug. 24, 1906	"
6	416	Nov. 7, 1906	"
6	930	Nov. 7, 1906	"
6	841.7	Nov. 7, 1906	Crescent Con. Pav. Co
6	310	Aug. 23, 1906	Warren Bit. Pav. Co.
5	63	July 26, 1906	Queen City Pav. Co.
6	569	July 2, 1906	Warren Bit. Pav. Co.
6	219	July 2, 1906	"
6	786	Sep. 19, 1906	Constructing & Pav. Co.
6	2,309	Aug. 20, 1906	"
6	580	Nov. 9, 1906	Barber Asphalt Pav. Co.
6	829	Aug. 16, 1906	"
6	791	Aug. 16, 1906	"
Total Lgth	15,604.0		

Stone Curb.

6 x 24	859.9	Sep. 19, 1906	Day Labor.
Total Lgth	859.9		

Private Concrete Sidewalks.

Length.	Curb.			Contractor.
	Class.	Length.		
Feet.		Feet.		
105				Private
142 3				"
50				"
102.6	Concrete	18		"
338.5	"	190		"
38.9				"
53	Concrete	53		"

PRIVATE CONCRETE SIDEWALKS—*Continued.*

No.	Street.	From.	To.	Side.	Width. Ft.	In.
8	Bathurst	n.e. cor. of Queen		East	12	
9	Bloor	Palmerston	Point east	South	6	
10	Bay	Cor. of Piper		West	11	
11	Bond	Shuter	Point south	East	6	
12	Binscarth			North	5	
13	Bedford	Opp. No. 12		West	5	
14	Briggs	Taylor	South end	East	3	
15	Bloor W.	Cor. Hamburg	Opp. No. 1,094	North	12	
16	Claremont	Queen	Point north	North	5	
17	College	Opp. Nos. 828 & 830		North	11	
18	Cluny	Crescent Rd	Roxborough	West	4	
19	College	Manning	Point west	North	12	
20	Castle	Walmer Rd.	Point west	North	5	
21	Colborne	Yonge	109 ft. west	North	7	
22	Duchess	Opp. S. Price & Sons		North	6	
23	Dundas	Opp. Pines Hotel	Cor. Bloor	North	11	7
24	Elizabeth	From end of Hospital Walk down past Nurses' Home.		East	5	
25	Esther	St. Patrick	Point south	West	10	
26	Front E	Opp. Nos. 84 and 90		North	13	
27	Front E	Vine	Point east	South	5	
28	Front W	Opp. Copp Clark	No 64 Front	North	11	5
29	High Park	Opp. Nos. 23, 29		East	5	
30	Hepbourne	Dovercourt	Point west	North	5	
31	Hackney	Opp. Nos. 79 and 81		East	5	
32	Homewood Pl	Wellesley Cres	Point north	East	4	6
33	Johnston Lane	Adelaide	Point south	East	5	
34	Johnston Lane	Opp. Nos. 6, 8 & 10		West	4	
35	James	Albert	Point north	East	14	
36	King W	Strachan	Massey	South	6	5
37	King W	Opp. Nos. 445, 447 and 449		South	18	
38	Lombard	Opp. Nos. 85 and 87		South	9	
39	Lansdowne	Dundas	College	East	6	
40	Logan	Natalie	Point 200 ft. north	East	5	
41	Lonisa	Opp. T. Eaton Co.		North	9	5
42	Lane 2nd w. Yonge	Louisa	Trinity	West	4	
43	Pine Hill Ave	Opp 2, 4, 6, 8 and 10		West	4	
44	Pacific	Atlantic	Point 210 ft. east	South	5	
45	Piper	Point w. of Bay	Point further west	North	9	
46	Pearl	Simcoe	Point west	North	4	
47	Queen	King	Point east	South	11	
48	Richmond	Opp. Robertson's Factory		North	7	5
49	Sheridan	College	Moutray	West	4	5
50	St. Joseph	Driveway opp. No. 5		South	21	
51	Strachan	King	Tracks	West	5	
52	Strachan	King	Wellington	East	5	

PRIVATE CONCRETE SIDEWALKS—*Continued.*

Length.	Curb.			Contractor.
	Class.	Length.		
Feet.		Feet.		
100.4	Concrete ..	21	.....	Private.
151.7	.....	.....	.....	"
45.9	.....	.....	.....	"
84	Concrete ...	84	.....	"
190	.....	.....	.....	"
83.4	.....	.....	.....	"
80	Concrete ...	82	.....	"
41.7	.....	.....	.....	"
87	Concrete ...	87	.....	"
30.7	"	30.7	.....	"
283.2	"	270.2	.....	"
41	"	36	.....	"
118.2	.....	.....	.....	"
109	.....	.....	.....	"
65.2	Concrete ..	65.2	.....	"
91.8	.....	.....	.....	"
401	.....	.....	.....	"
46.6	.....	.....	.....	"
106	.....	.....	.....	"
326.5	Concrete ..	326.5	.....	"
35.6	.....	.....	.....	"
112	Concrete ..	112	.....	"
194.4	"	194.4	.....	"
70.9	.....	.....	.....	"
141.3	.....	.....	.....	"
201.8	.....	.....	.....	"
50.7	.....	.....	.....	"
106	.....	.....	.....	"
151.4	.....	.....	.....	"
77.5	.....	.....	.....	"
52.5	.....	.....	.....	"
296	.....	.....	.....	"
201	.....	.....	.....	"
109.5	Concrete ..	16	.....	"
100	"	100	.....	"
93	.....	.....	.....	"
209.1	Concrete ..	219.9	.....	"
47.8	.....	.....	.....	"
89.3	.....	.....	.....	"
127	.....	.....	.....	"
92	.....	.....	.....	"
213	.....	.....	.....	"
14	.....	.....	.....	"
415	.....	.....	.....	"
466.6	.....	.....	.....	"

PRIVATE CONCRETE SIDEWALKS—*Continued.*

No.	Street.	From.	To.	Side.	Width.
53	Shuter	Church	Bond	South	6
54	Trinity Sq.	Opp. T. Eaton's		South	9 9
55	Victoria	161 ft. s. of Gould	155 ft. further south	West	12
56	Wellington	Yonge	90 ft. east	South	10
57	William	Queen	North	East	13
58	Yonge	Opp. Nos. 130 and	132	West	11
59	Yonge	Opp. Nos. 175½ and	177	East	12
60	Yonge	n.e. cor. of Colborne		East	10
61	Yorkville	Opp. Nos. 11, 13,	15, 17	South	6
62	Yorkville	Yonge	Point west	South	6

CONCRETE SIDEWALKS.

Street.	From.	To.	Side.	Width. Feet.
Albany	Dupont	City limits	West	5
Armoury	University	Chestnut	North	4
Adelaide	John	Widmer	South	6
Alexander	Yonge	Church	North	5
Alexander	Yonge	Church	South	5
Atkins	Brock	Sheridan	Both	5
Aberdeen	Ontario	222 ft. east	South	4
Aberdeen	Parliament	441 ft. west	South	4
Anderson	Simcoe	University	North	4
Albany	Dupont	Wells	West	5
Argyle	Shaw	Givens	North	5
Allan Gardens	Fountain	South Gate		16
Allan Gardens	Fountain	114 ft. west		16
Bishop	Davenport	West end	South	4
Borden	College	Ulster	West	5
Borden	Ulster	Herrick	West	5
Breadalbane	Yonge	St. Vincent	South	5
Breadalbane	Yonge	Surrey Place	North	5
Bathurst	Dupont	City limits	East	6
Barton	Bathurst	Palmerston	North	5
Barton	Brunswick	Howland	South	5
Barton	Palmerston	125 ft. east	South	5
Bloor	Brock	Lansdowne	North	5

PRIVATE CONCRETE SIDEWALKS—*Continued.*

Length.	Curb.			Contractor.
	Class.	Length.		
291				Private.
120.4				"
155				"
91	Concrete...	91		"
102.5	"	27.3		"
27.3				"
37	Concrete...	37		"
104.4				"
108.4				"
146.3				"
8,164.3		2,061.2		

CONCRETE SIDEWALKS.

Length. Feet.	Curb.		Completed.	Contractor.
	Class.	Length. Feet.		
213.5			May 1, 1906	Crescent Concrete Pav. Co.
474.5			May 14, 1906	Excelsior Concrete Pav. Co.
324.8			May 19, 1906	Crescent Concrete Pav. Co.
906.5			June 20, 1906	Godson Contracting Co.
906.5			June 20, 1906	Godson Contracting Co.
936	5-in. concrete	942	July 7, 1906	Excelsior Concrete Pav. Co.
223			July 19, 1906	Constructing & Paving Co.
440.5		440.5	July 21, 1906	Constructing & Paving Co.
139.8		128	July 6, 1906	Day labor.
1,109		26	July 20, 1906	Grant Contracting Co.
290		306	July 17, 1906	Gale Paving Co.
300.8			Aug. 25, 1906	Day labor.
113.1			Aug. 29, 1906	"
414.8			April 28, 1906	Constructing & Paving Co.
1,173.5			April 27, 1906	Gale Paving Co.
1,028	5-in. concrete	1,062.7	May 9, 1906	Crescent Concrete Pav. Co.
651.2	"	661.1	May 10, 1906	Queen City Concr. Pav. Co.
1,242	"	125.5	May 21, 1906	Queen City Concr. Pav. Co.
214.1			May 9, 1906	Day labor.
580.2	5-in. concrete	559.2	May 17, 1906	Ontario Concrete Paving Co.
296	"	257	May 19, 1906	Ontario Concrete Paving Co.
159.7	"	163.7	Aug. 29, 1906	Day labor.
994 2	"	10.8	May 21, 1906	Excelsior Concrete Pav. Co.

CONCRETE SIDEWALKS—*Continued.*

Street.	From.	To.	Side.	Width. Feet.
Bloor	Dovercourt	Westmoreland	North	12
Bloor	Bathurst	Markham	North	6
Bloor	30 ft. w. of Bathurst	Markham	South	6
Bloor	Brunswick	Major	South	6
Bloor	Lansdowne	Dundas	North	5
Birtle	Dundas	West end	South	5
Birtle	430 ft. w. of Dundas	City limits	North	5
Bay	Lake	Harbor	East	8
Broadview	121 ft. n. of Sparthall	Withrow	East	5
Broadview	19 ft. n. of Queen.	Gerrard	East	6
Beatrice	College	600 ft. south	East	5
Beatrice	College	600 ft. south	West	5
Beatrice	Arthur	600 ft. s. of College	East	5
Beatrice	400 ft. n. of Arthur	600 ft. s. of College	West	5
Brunswick	Lowther	Wells	East	5
Bernard	Madison	Spadina	North	5
Bernard	Huron	Madison	South	5
Bernard	Huron	Madison	North	5
Bernard	Walmer	Kendall	South	5
Brock	College	N. limit No. 478	West	5
Balmoral	Avenue Road	East City limits	South	5
Balmoral	Poplar Plains	Avenue Road	South	5
Blong	Pape	308 ft. east	North	5
Boustead	Dundas	Indian Rd	North	5
Boustead	Roncesvalles	500 ft. w	South	5
Boustead	500 ft. w. Roncesvalles.	149¾ ft. w	South	5
Bulwer	Soho	Spadina	North	4
Bellwoods	Queen	285½ ft. n.	West	4.5
Bathurst	Bloor	Follis	West	6
Bathurst	Queen	Wolseley	East	6
Bathurst	Queen	Farley	East	6
Buller	Kippendavie	230 ft. w	North	4
Binscarth	Glen Rd	Pelham Pl	South	6
Bloor	Bathurst	139 ft. w. of Albany	North	12.5
Bloor	100 ft. w. of Albany	39 ft. further w	North	12 5
Beaconsfield	Dundas	Afton	West	5
Church	Carlton	Wellesley	West	6
Church	Isabella	Charles	East	6
Church	Alexander	121 ft s of Wellesl'y	East	6
Church	Wellesley	Gloucester	East	6
Close	King	Queen	East	5
Close	King	Queen	West	5
Collier	Park Rd	East End	North	4
Conduit	Dundas	West End	South	5

CONCRETE SIDEWALKS—*Continued.*

Length. Feet.	Curb.		Date Completed.	Contractor.
	Class.	Length. Feet.		
236			June 15, 1906	Crescent Concrete Pav. Co.
308			July 27, 1906	Grant Contracting Co.
250.1			July 24, 1906	" " "
311.2			Aug. 27, 1906	" " "
2,502.4			Sept. 7, 1906	A. Gardner & Co.
598.5			June 20, 1906	Grant Contracting Co.
250			June 20, 1906	" " "
320.5			June 9, 1906	Day labor.
725 4			June 9. 1906	Queen City Concr. Pav. Co.
2,210.5			July 30, 1906	Crescent Concrete Pav. Co.
583.3			June 9, 1906	Constructing & Paving Co.
600.5			June 9, 1906	" "
1,067.3			Nov. 16, 1906	Ontario Concrete Paving Co.
667.8			Nov. 16, 1906	" " "
788.6	5-in. concrete	29	June 21, 1906	W. R. Payne.
279	"	262	June 21, 1906	Queen City Concr. Pav. Co.
279	"	260.5	July 4, 1906	Grant Contracting Co.
279.2	"	260.2	July 4, 1906	" " "
257			Sept. 7, 1906	Day labor.
1,475.5			July 27, 1906	W. R. Payne.
629	5-in. concrete	629	July 7, 1906	Crescent Concrete Pav. Co.
598	"	598	July 16, 1906	" " "
321.5	"	309.3	Sept. 4, 1906	Queen City Concr. Pav. Co.
1,027	5-in. concrete	1,027	Aug. 23, 1906	Excelsior Concrete Pav Co.
500	"	500	Sept.13, 1906	A. Gardner & Co.
149.7	"	149.7	Sept.12, 1906	"
720.3			Oct. 23, 1906	Grant Contracting Co.
285			Aug. 27, 1906	Day labor.
1,349.7			Car'd o'r 1907	Crescent Concrete Pav. Co.
199			Sept.15, 1906	A. Gardner & Co.
232.6			Oct. 25, 1906	Day labor.
225.6	5-in. concrete	225.6	Oct. 3, 1906	"
518.8			Oct. 29, 1906	"
186			Oct. 20, 1906	"
39			Oct. 20, 1906	"
912.2			Oct. 27, 1906	"
1,308.8			Apl. 23, 1906	R. A. Rogers & Co.
381			July 3, 1906	Queen City.
578.5			June 28, 1906	Queen City Con. Pav. Co
544.6			Aug. 10, 1906	Toronto Con & Pav. Co.
507.3			Apl. 23, 1906	A. Gardner & Co.
1,182.7			May 17, 1906	Crescent Concrete Pav. Co.
372.5			May 18, 1906	Gerrard A. King
650.2	5-in. concrete	657.6	June 27, 1906	R. A. Rogers & Co.

CONCRETE SIDEWALKS—*Continued.*

Street.	From.	To.	Side.	Width. Feet.
Conduit	Dundas	City Limits	North	5
Carlyle	St. Patrick	N. limit No. 34	West	3.5
Cumming	Bolton	DeGrassi	North	4
Concord	Hallam	Van Horne	West	5
Cottingham	Rathnally	Poplar Plains	South	5
Concord	Bloor	511 ft. n. of Northumberland.	West	5
Curzon	Queen	597 ft. n	East	5
Chesley	Brock	East End	South	4
Clarendon	Avenue Rd	Poplar Plains	South	5
Clarendon	Avenue Rd	Poplar Plains	North	5
Court St. Square	43¼ ft. n. to 76 ft. St, thence 140½	further n. of Court ft. w.	E. & N	7
Charlotte	King	Adelaide	West	4.5
Charlotte	King	Adelaide	East	4.5
Cluny	Crescent Rd	Roxborough	East	5
Chapel	St. Mary	Irwin	East	4
Churchill	Ossington	254 ft. w	South	4.5
Churchill	Ossington	264 ft. w	North	4.5
Cowan Avenue Fire	Hall			30
Dufferin	Alma	Peel	East	5
Delaware	Hepbourne	Dewson	East	5
Dunn	G. T. R	800 ft. s	East	5
Dunn	G. T. R	800 ft. s	West	5
Dundas	Lansdowne	Sheridan	South	6
Dundas	Sheridan	Dufferin	South	6
Dundas	Argyle	Rolyat	West	10
Dupont	Bathurst	Albany	South	5
Dupont	Huron	Spadina	South	5
Dupont	Walmer	132 ft. e Kendall	South	5
Davenport	17ft. w. of Avenue Rd	619 ft. further west	North	5
Defoe	Niagara	Stafford	South	5
Draper	Front	Wellington	West	4
Dewson	Delaware	Dovercourt	North	5
Dalhousie	Gerrard	Gould	East	5
Duchess	Ontario	Berkeley	North	6
Dale	Glen	Maple	North	5
Elizabeth	Elm	Gerrard	East	6
Emerson	Bloor	Paton Rd	West	5
Emerson	Bloor	434 ft. north	East	5
Esther	St. Patrick	Grange	East	5
Edward	Centre	University	South	5
Esther	St. Patrick	Grange	West	5
Esther	Queen	Wolseley	East	5
Exhibition	Art Building	Poultry Building		6
Exhibition	Approach to Press	Bureau		6

CONCRETE SIDEWALKS—*Continued.*

Length.	Curb.		Completed.	Contractor.
	Class.	Length. Feet.		
759.5	5-in. concrete	752.1	June 26, 1906	R. A. Rogers & Co.
373.5	"	385.5	June 15, 1906	Day labor.
220.4			June 21, 1906	"
875.7	5-in. concrete	875.7	June 13, 1906	Crescent Con. Pav. Co.
507.3			May 10, 1906	Excelsior Con. Pav. Co.
887			Sept. 24, 1906	Ontario Con. Pav. Co.
597			July 11, 1906	Toronto Con. & Pav. Co.
293.7	5-in. concrete	293.7	July 26, 1906	Day labor.
593.5	"	593.5	Aug. 2, 1906	Crescent Concrete Pav. Co.
593.8	"	593.8	Aug. 23, 1906	Day labor.
205.5			Aug. 14, 1906	Ontario Concrete Pav. Co.
407.9			Aug. 16, 1906	Day labor.
435.5			Aug. 18, 1906	"
351	5-in. concrete	271	Sept. 14, 1906	W. R. Payne.
282.5	"	292.5	Sept. 24, 1906	Day labor.
259.5	"	252.5	Nov. 9, 1906	"
258.7	"	251.2	Nov. 9, 1906	"
45.2			May 23, 1906	"
289.6	5-in. concrete	36.4	Apl. 20, 1906	A. Gardner & Co.
1,032.7	"	1,051.4	May 1, 1906	Grant Contracting Co.
728	"	739.4	May 30, 1906	Howard & Leach.
747.3	"	763.3	June 6, 1906	"
1,416.9			June 20, 1906	Excelsior Con. Pav. Co.
569.9			July 11, 1906	W. R. Payne.
617.6			Aug. 17, 1906	A. Gardiner & Co.
217.7	5-in. concrete	200.2	May 10, 1906	City Engineer.
602			July 21, 1906	Crescent Concrete Pav. Co.
141.7	5-in. concrete	125.7	Oct. 25, 1906	Day labor.
618.1			June 23, 1906	Crescent Concrete Pav. Co.
607.8	5-in. concrete	599.5	June 30, 1906	Godson Contracting Co.
512.2	"	40	July 24, 1906	Toronto Con. and Paving Co.
286.2	"	279.2	July 19, 1906	Ontario Concrete Paving Co.
585.3			July 21, 1906	A. Gardner & Co.
384	5-in. concrete	392	July 30, 1906	W. R. Payne.
779.5			Nov. 29, 1906	Day labor.
399.7			June 15, 1906	Crescent Concrete Pav. Co.
806	5-in. concrete	806	June 26, 1906	Harvard & Leach.
437.4	"	437.4	May 31, 1906	Grant Contracting Co.
349.4	"	318.9	June 27, 1906	Crescent Concrete Pav. Co.
231.2			July 9, 1906	Day labor.
285.2			July 30, 1906	"
252.3			Oct. 25, 1906	"
722.3			Aug. 8, 1906	"
113.3			Aug 16, 1906	"

CONCRETE SIDEWALKS—*Continued.*

Street.	From.	To.	Side.	Width. Feet.
Exhibition	Approach to Proces	s Building		
Exhibition	Approach to Machi	nery Hall		8
Foster Pl.	Elizabeth	East end	Both	4
Farnham	Avenue Rd.	East City Limits	North	5
Farnham	Avenue Rd.	East City Limits	South	5
Fern	Sorauren	Roncesvalles	North	5
Fern	McDonell	Sorauren	South	5
Frankish	Brock	Sheridan	North	4
First	157½ ft. e. of Logan	130 ft. further east.	North	4
First	172 ft. e. of Logan.	162 ft. further east	South	4
Fuller	Queen	Marion	West	5
Fuller	Queen	669 ft. north	East	5
Fuller	669 ft. n. of Queen.	27 ft. further north.	East	5
Fraser	Liberty	133 ft. south	West	5
Florence	Dufferin	Brock	North	5
Florence	Dufferin	Brock	South	5
Follis	Bathurst	Palmerston	North	5
Grant	Kintyre	North end	West	4
Grant	644 ft. n. of Queen.	North end	East	4
Grove	Foxley	Dundas	West	5
Grove	Foxley	Dundas	East	5
Grace	261 ft. s. of College	Arthur	West	5
Grace	994 ft. n. of College	500 ft. further north	East	5
Grace	994 ft. n. of College	500 ft. further north	West	5
Gibson	Yonge	West end	South	4
Gibson	Yonge	West end	North	4
Gordon	Dufferin	Sheridan	South	5
Gordon	Dufferin	Sheridan	North	5
Galley	Sorauren	750 ft. west	North	5
Galley	Lot 18	Roncesvalles	South	5
Gladstone	North Lot 265	College	East	5
Gladstone	College	Lindsay	East	5
Gladstone	Queen	Argyle	East	6
Gerrard	Pape	Leslie	North	5
Gerrard	Blackburn	Broadview	South	6
Gerrard	Logan	Carlaw	North	5
Gerrard	Berkeley	Ontario	South	5
Gerrard	Pape	Leslie	South	5
Grange	Beverley	Spadina	North	5
Grange	Spadina	Esther	North	5
Galt	Gerrard	North end	East	4
Grenville	Elizabeth	West end	South	5
Hagerman	Elizabeth	219 ft. east	North	5
Hagerman	Elizabeth	171 ft. east	South	5
Huron	Bernard	Dupont	West	5

CONCRETE SIDEWALKS—*Continued.*

Length. Feet.	Curb. Class.	Curb. Length. Feet.	Completed.	Contractor.
182.5	....	.....	Aug. 18, 1906	Day labor.
452.7	....	....	Aug. 15, 1906	"
293 8	5-in. concrete ...	293.8	Apr. 26, 1906	"
629.4	"	629.4	May 21, 1906	W. R. Payne.
629 4	"	629.4	May 21, 1906	"
1,373	....	.....	June 14, 1906	Grant Contracting Co.
781.4	.....	.....	Nov. 23, 1906	W. R. Payne.
434.6	5-in. concrete....	434.6	July 17, 1906	Excelsior Concrete Pav. Co.
130	"	130	July 19, 1906	Queen City Con. Pav. Co.
142.5	"	142.5	July 18, 1906	Day labor.
863.7	"	867.7	Aug. 3, 1906	Excelsior Concrete Pav. Co.
559.5	" .. .	594.7	Aug. 13, 1906	" " "
27	"	27	Aug. 13, 1906	" " "
133.1	... ...	.....	July 23, 1906	Grant Contracting Co.
1,042	5 in. concrete....	1,078	Aug. 17, 1906	Queen City Con. Pav. Co.
1,049	"	1,070	Aug. 4, 1906	" "
588	.....	.....	Nov. 17, 1906	Crescent Concrete Pav. Co.
198.2	5-in. concrete....	173	Apr. 21, 1906	Ontario Concrete Paving Co.
159.3	" ...	159.3	Aug. 4, 1906	J. H. McKnight.
676	....	....	May 4, 1906	Day labor.
688.4	....	.....	Oct. 27, 1906	Grant Contracting Co.
1,152.8	5-in. concrete....	1,164	May 15, 1906	" "
505.4	"	505.4	Nov. 19, 1906	Day labor.
506.6	"	506.6	Nov. 29, 1906	"
415.7	"	415.7	May 16, 1906	A. Gardner & Co.
367	....	.....	July 27, 1906	Godson Contracting Co.
504.2	5-in. concrete....	492	June 1, 1906	Day labor.
504	5-in. concrete....	499	Aug. 2, 1906	Grant Contracting Co.
765 5	5-in. concrete....	779	June 11, 1906	W. R. Payne.
1,176.8	5-in. concrete....	1,176 8	June 11, 1906	W. R. Payne.
849	5-in. concrete....	853	June 6, 1906	Day Labor.
333.8	5-in. concrete ...	333.8	Aug. 30, 1906	Excelsior Con. Pav. Co.
976.5	5-in. concrete....	986.6	Oct. 16, 1906	Dominion Paving Co.
1,896.6	5-in. concrete...	1,896.6	July 10, 1906	Gale Paving Co.
600.8	.....	. .....	Aug. 4, 1906	R. A. Rogers.
621.6	....	.....	Sep. 26, 1906	Harvard & Leach Pav. Co.
306	5-in. concrete....	344	Oct. 3, 1906	Ontario Concrete Pav. Co.
906	5-in. concrete....	1,878.4	Carried over to 1907.	Queen City Con. Pav. Co.
1,034	5-in. concrete....	1,052.3	Sep. 4, 1906	W. R. Payne.
849	. ...	.....	Sep. 10, 1906	Grant Contracting Co.
803	5-in. concrete ...	803	Sep. 7, 1906	Ontario Concrete Pav. Co.
174.9	....	.....	Aug. 30, 1906	Day Labor.
190.3	.....	.....	Apl. 18, 1906	"
172	....	.....	Apl. 19, 1906	"
913.2	.....	.....	Apl 28, 1906	Crescent Concrete Pav. Co.

CONCRETE SIDEWALKS—*Continued.*

Street.	From.	To.	Side.	Width Feet.
Huron	Phœbe	Grange	West	5.5
Huxley	Dufferin	Jameson	North	5
Hickson	St. Clarens	East end	South	5
Hawthorne	650 ft. n. of Dale	Elm Avenue	West	5
Harbord	Huron	St. George	North	5
Harbord	Huron	261 ft. east	South	5
Hepbourne	Dovercourt	Rusholme	South	5
Henry	Baldwin	Cecil	West	5
Henry	Baldwin	Cecil	East	5
Hackney	Queen	Wolsely	West	3
Hackney	Queen	Wolsely	East	3
Havelock	Hepbourne	Bloor	East	5
Havelock	Dewson	510 ft. north	East	5
Havelock	510 ft. n. of Dewson	140 ft. further north	East	5
Howie	Clark	North end	West	4
Humbert	Brookfield	Dovercourt	South	4
Jones	Queen	Dagmar	West	5
Jefferson	188 ft s. of Liberty	277½ ft. further s.	West	5
Jarvis	Esplanade	274 ft. north	East	13
Kenilworth	Queen	400 ft. south	West	5
Kintyre	Broadview	Grant	North	4
Kintyre	Broadview	Grant	South	4
Kensington	St. Patrick	Baldwin	West	5
King	Parliament	Berkeley	South	10
King	66 ft. e. of Trinity	Sackville	South	9
King	Trinity	Erin	South	8
King	St. Laurence	131 ft. e. of River	South	6
King	Sumach	River	North	8
King	Sumach	St. Lawrence	South	6
Kew Beach	Fire Hall	Approach		32.2
Lobb	Crawford	Shaw	North	5
Lobb	Crawford	Shaw	South	5
Laxton	Jameson	Dowling	North	5
Laxton	Jameson	Dowling	South	5
Lakeview	Dundas	Churchill	East	6
Leslie	Gerrard	Harriett	East	5
Leslie	Queen	Gerrard	East	5
Lowther	Spadina	St. George	South	5
Lowther	Spadina	165 ft. west	South	5
London	Markham	Manning	North	4½
Louisa	60 ft. w. Teraulay	Elizabeth	North	5.5
Logan	Eastern	1112 ft. south	West	4
Lake	Bay	A point east	South	12
Manning	College	Ulster	West	5
McMurrich	Davenport	Belmont	East	4
Marjory	Gerrard	280 ft. south	East	5

CONCRETE SIDEWALKS— *Continued.*

Length Feet.	Curb.		Completed.	Contractor.
	Class.	Length. Feet.		
589.3	5-in. concrete....	591.5	Apl 23, 1906	W. R. Payne.
2,305.2	5-in. concrete....	2,278.1	July 9, 1906	A. Gardner & Co.
294.5	.....	.....	May 22, 1906	Day labor.
176	....	.....	May 31, 19 6	R. A. Rogers & Co.
427.7	.....	.....	June 20, 1906	Crescent Concrete Pav. Co.
272	....	.....	June 20, 1906	" "
433.3	5-in. concrete....	414.3	June 29, 1906	Day labor.
435	.....	.....	July 11, 1906	Ontario Concrete Pav. Co.
393.8	.....	.....	July 11, 1906	" "
265.1	5-in. concrete....	16	July 5, 1906	Day labor.
265.1	5-in. concrete ...	16.4	July 5, 1906	"
764.5	5-in. concrete ...	757	Sep. 11, 1906	W. R. Payne.
503	5-in. concrete....	503	Sep. 26, 1906	King & Haynes.
140	5-in concrete....	140	Sep. 26, 1906	" "
467.8	.....	.....	Sep. 22, 1906	Crescent Concrete Pav. Co.
567	5-in. concrete....	571	Oct. 16, 1906	Day labor.
1,191	5 in. concrete ..	1,195.8	July 26, 1906	Toronto Con. & Pav. Co.
261.9	5-in. concrete....	271.9	July 4, 1906	Crescent Concrete Pav. Co.
298.8	....	.....	Nov. 6, 1906	Queen City Con. Pav. Co.
403.5	5-in. concrete ..	403.5	June 22, 1906	Crescent Concrete Pav. Co.
320.4	5-in. concrete ...	320.4	Sep. 12, 1906	Queen City Con. Pav. Co.
333.5	5-in. concrete. ..	333.5	Sep. 1, 1906	J. H. McKnight.
761.5	....	.....	July 14, 1906	Day labor.
337	6-in. concrete....	354	May 14, 1906	Ontario Concrete Pav. Co.
407.1	.....	.....	May 10, 1906	" "
149.2	.....	.....	May 10, 1906	" "
201.2	6-in. concrete....	201.2	May 3, 1906	A. Gardiner & Co.
765.8	.....	.....	May 3, 1906	" "
453	....	.....	May 4, 1906	Ont. Con. Pav. Co.
37.9	.....	.....	Aug. 21, 1906	Day labor.
272.3	.. ..	.....	Nov. 23, 19 6	Crescent Con. Pav. Co.
276.8	....	.....	Nov. 23, 19 06	" "
654.1	5-in. concrete....	642.3	Aug. 18, 1906	Constructing and Pav. Co.
661.5	"	649.7	Aug. 18, 1906	" "
849.5	....	.....	Aug. 23, 1906	A. Gardner & Co.
645	5-in. concrete.. .	645	Aug. 1, 1906	" "
2392	"	2426	June 14, 1906	Toronto Cont. and Pav. Co.
958.6	....	.....	July 18, 1906	A. Gardner & Co.
163.9	5-in. concrete....	163.9	Apl. 24, 1906	Day labor.
875.3	....	....	May 7, 1906	Grant Con. Co.
274	5-in. concrete...	274	Apl. 23, 1906	Crescent Con. Pav. Co.
1102	" ..	962.3	Apl. 20, 1906	Queen City Con. Pav. Co.
129.7	.. ..	.....	June 26, 1906	Day labor.
1267.5	....	.....	Oct. 24, 1906	Grant Con. Co.
793.7	.....	.....	Nov. 7, 1906	Crescent Con. Pav. Co.
283	5-in. concrete....	283	Oct. 29, 1906	W. R. Payne.

CONCRETE SIDEWALKS—*Continued.*

Street.	From.	To.	Side.	Width. Feet.
McGee	Queen	Eastern	West	5
Massey	Defoe	Queen	West	5
Massey	King	Queen	East	5
Montrose	Bloor	1000 ft. south	East	5
Mulock	Church	East End	North	4
Muir	Dufferin	Sheridan	North	4
Mount Stephen	Munro	Broadview	North	4.5
Mount Stephen	Munro	Broadview	South	4.5
Munro	Mount Stephen	Gerrard	East	4.5
Munro	Matilda	Mount Stephen	West	4
Munro	Mount Stephen	Gerrard	West	4
Morley	Queen	Eastern	West	4
Millicent	Dufferin	West Terminus	North	4
MacKenzie	Dale	Castle Frank	West	6
Mohawk	Lake Shore	450 ft. north	C of St	6
McMillan	Alexander	Maitland	West	4
Mansfield	Bellwoods	Grace	South	5
Mansfield	Manning	Grace	North	5
Markham	Bloor	Follis	West	5
Markham	Bloor	Barton	East	5
McGill	197 ft. e. Yonge	Mutual	South	5
Molson	Roxboro	MacPherson	Both	4
Mutual	Gerrard	Carlton	West	4 5
Mutual	Shuter	Wilton	West	5
Northcote	Queen	Afton	East	5
North	St. Mary	Bloor	East	6
North	St. Mary	Bloor	West	6
Nelson	Duncan	Simcoe	North	5
Nelson	Simcoe	Duncan	South	5
Northumberland	Concord	Ossington	South	4
Nassau	Spadina	Augusta	South	5
Oriole	Heath	St. Clair	West	5
Ontario	Carlton	First lane north	West	5
Orde	Murray	McCaul	South	4
Osgoode	University	Chestnut	South	6
Pernam and Binscarth	Glen	Scholfield	South	6
Parliament	Wellesley	Howard	East	6
Parliament	St. David	Wilton	East	8
Parliament	Winchester	Prospect	West	6
Parkway	Dundas	College	West	5
Parkway	Dundas	College	East	5
Palmerston	London	Seaton Sq.	West	5
Palmerston	Robinson	Arthur	East	5
Palmerston	Robinson	Arthur	West	5
Pearson	Fuller	Macdonell	South	5

CONCRETE SIDEWALKS—*Continued.*

Length. Feet.	Curb.		Completed.	Contractor.
	Class.	Length. Feet.		
950.8			Oct. 15, 1906	Queen City Con. Pav. Co.
711.5	5-in. concrete	711.5	Oct. 16, 1906	Grant Con. Co.
1154	"	1149.5	Oct. 16, 1906	" "
1010	"	1012	Sep. 22, 1906	" "
349.4	"	349.4	Oct. 6, 1906	Ont. Con. Pav. Co.
488	"	488	Oct. 10, 1906	Day labor.
386.9			Sep. 19, 1906	Harvard & Leach.
386.9			Sep. 19, 1906	" "
479.5	5-in. concrete	473	Aug. 31, 1906	J. H. McKnight.
1268	"	1300	July 11, 1906	Harvard & Leach.
491	"	493	May 19, 1906	R. A. Rogers & Co.
582	"	577.8	Aug. 7, 1906	W. R. Payne.
1279.8	"	1263.4	Aug. 16, 1906	Grant Con. Co.
840 5			Aug. 1, 1906	Constructing and Pav. Co.
449.7			Aug. 1, 1906	Day labor.
337.5	5-in. concrete	349.5	July 20, 1906	J. H. McKnight.
272	"	274	June 7, 1906	Crescent Con. Pav. Co.
746.8	"	750	June 4, 1906	" "
1564.6			May 12, 1906	Gerrard A. King.
1031.1			May 4, 1906	" "
1107.7	5-in. concrete	1114	May 12, 1906	W. R. Payne.
588			May 17, 1906	Crescent Con. Pav. Co.
599.3	5 in. concrete	574.9	May 1, 1906	W. R. Payne.
601	"	583	Apl. 23, 1906	Day labor.
1416.9			Oct. 22, 1906	A. Gardner & Co.
783			Sep. 17, 1906	Day labor.
769			Sep. 18, 1906	"
509.2	5 in. concrete	396.1	Apl 29, 1906	Constructing and Pav. Co.
529.3	5-in. concrete	522.5	Aug. 4, 1906	Harvard & Leach.
292	"	260.7	Aug. 21, 1906	Grant Contracting Co.
750.9	"	763	July 12, 1906	Godson Contracting Co.
739.2	"	739.2	July 11, 1906	Grant Contracting Co.
322			May 23, 1906	A. Gardner & Co.
408			May 17, 1906	Grant Contracting Co.
496.2			May 19, 1906	A. Gardner & Co.
877	5-in. concrete	877	Nov. 20, 1906	Day labor.
1,215.6	"	18.5	Oct. 27, 1906	Queen City Concr. Pav. Co.
443			Ap'l 23, 1906	Excelsior Concrete Pav. Co.
459.3	5-in. concrete	431	July 13, 1906	Day labor.
866	"	866	Sept. 13, 1906	Excelsior Concrete Pav. Co.
854	"	854	Sept. 21, 1906	" " "
124.9	"	117	Aug. 22, 1906	Grant Contracting Co.
1,273.3	"	1,276	June 6, 1906	Godson Contracting Co.
1,273.2	"	1,276	May 30, 1906	" " "
297.5			Aug. 3, 1906	W. R. Payne.

CONCRETE SIDEWALKS—*Continued.*

Street.	From.	To.	Side.	Width. Feet.
Pearson	Macdonell	264 ft. west	North	5
Parkview	Wellesley	238 ft. north	Wes	4
Park Rd.	Rosedale Ravine Drive	17 ft. s. of S. Drive	West	4
Pape	Gerrard	Bain	East	5
Perth	Bloor	Wallace	East	5
Pacific	157 ft. s. of Liberty	Atlantic	Northeast	5
Pembroke	Wilton	Gerrard	East	5.5
Price	Yonge	East end	South	4.5
Peter	Front	Wellington	East	5
Paul	Broadview	Munro	South	4
Queen	Broadview	104 ft. east	South	6
Queen	McGee	Logan	South	8
Queen	De Grassi	Pape	North	8
Queen	Duncan	John	South	12
Queen	Bolton	De Grassi	North	11
Queen	John	Spadina	South	12
Queen	Dunn	Wilson	South	6
Queen	100 ft. w. of Niagara	Strachan	South	8.5
Queen's Park	Bloor	964 ft. south	East	6
Rolyat	Dundas	Grove	South	5
Roxborough	Avenue Rd	632 ft. east	South	5
Roxborough	Yonge	632 ft. e. of Ave. Rd.	South	5
Rusholme	452 ft. s. of Dawson	College	East	5
Rusholme	Hepbourne	Bloor	East	5
Richmond	York	Simcoe	South	6
Reservoir Park	South Gate	Rosedale entrance		4.5
River	Gerrard	Spruce	East	4.5
River	Gerrard	Spruce	West	4.5
Roseberry	Bathurst	East end	South	5
Richmond	Fire Hall approach			12
Rathnally	McMaster	Cottingham	East	5
Robinson	Palmerston	Euclid	North	5
Robinson	Bathurst	Palmerston	North	5
Stephanie	McCaul	John	North	5
Scofield	Binscarth	North End	West	6
St. Clarens	Dundas	Wyndham	East	5
St. Helen's	Dundas	Bloor	East	4.5
Stephanie	John	Beverley	Both	5
Stephanie	John	McCaul	South	5
Sheppard	Richmond	Adelaide	East	6
Seaton Sq., w. br'ch	Seaton Sq	Seaton Sq	East	4
Seaton Sq., s. br'ch	Seaton Sq	Seaton Sq	North	5
Sorauren	Dundas	Wright	West	5
Sackville	Wellesley	North end	West	4
Sackville	Winchester	Amelia	West	5

CONCRETE SIDEWALKS—*Continued.*

Length. Feet.	Curb. Class.	Curb. Length. Feet.	Completed.	Contractor.
262.2			Aug. 3, 1906	W. R. Payne.
244.9			July 26, 1906	Queen City Concr. Pav. Co.
1,176.9			May 30, 1906	Gerrard A. King.
1,619			June 14, 1906	Ontario Concrete Pav. Co.
1,419.5	5-in. concrete	1,455	June 7, 1906	Excelsior Concrete Pav. Co.
877.4	"	27.8	June 7, 1906	Grant Contracting Co.
966.7			June 4, 1906	Queen City Concr. Pav. Co.
517.2	5-in. concrete	517.2	May 28, 1906	Grant Contracting Co.
434.9	"	434.4	May 22, 1906	Crescent Concrete Pav. Co.
420			April 24, 1906	Queen City Concr. Pav. Co.
121.5			Nov. 16, 1906	Ontario Concrete Pav. Co.
802	5-in. concrete	88.5	Oct. 1, 1906	Queen City Concr. Pav. Co.
2,093	"	97.6	Sept. 28, 1906	" "
404.1			July 3, 1906	Day labor.
230			June 21, 1906	Ontario Concrete Paving Co.
1,272.2			May 16, 1906	Tor. Contracting & Pav. Co.
2,096.3	5-in. concrete	158.5	May 18, 1906	Harvard & Leach.
727.2	6-in. concrete	740.2	June 28, 1906	Day labor.
961.3	5-in. concrete	19.5	July 18, 1906	Queen City Concr. Pav. Co.
563.3	"	563.3	Nov. 1, 1906	Dominion Paving Co.
632			Oct. 17, 1906	Crescent Concrete Pav. Co.
1,330.4	5-in. concrete	1,328	Oct. 10, 1906	" " "
461			Oct. 22, 1906	Day labor.
760 4			June 27, 1906	" "
637.5			Sept. 18, 1906	W. R. Payne.
195.7			Aug. 27, 1906	Day labor.
410.9	5-in. concrete	410.9	Aug. 25, 1906	Ontario Concrete Pav. Co.
413.5	"	413.5	Aug. 25, 1906	" " "
333.2	"	333.2	July 13, 1906	Gale Paving Co.
75			June 18, 1906	Day labor.
313.5			May 31, 1906	"
289	5-in. concrete	265	May 5, 1906	Constructing & Pav. Co.
574.5			Apr. 21, 1906	Grant Contracting Co.
342	5-in. concrete	330.5	Sep. 25, 1906	A. Gardiner & Co.
445.5	"	462	Nov. 19, 1906	Day labor.
928.5			Nov. 4, 1906	"
2,842.8	5-in. concrete	2,842.8	Oct. 23, 1906	W. R. Payne.
1,635.5	"	463	Oct. 5, 1906	A. Gardner & Co.
299.5	"	329.5	Sep. 27, 1906	" "
426			Oct. 22, 1906	Ontario Concrete Pav. Co.
183			Oct. 13, 1906	Day labor.
175	5-in. concrete	175	Oct. 13, 1906	"
1,541.5	"	1,580.9	Sep. 25, 1906	Toronto Con. & Pav. Co.
252.8	"	260.8	Sep. 22, 1906	Day labor.
476			June 18, 1906	Gale Paving Co.

CONCRETE SIDEWALKS—*Continued.*

Street.	From.	To.	Side.	Width. Feet.
Sackville	Queen	St. David	West	5
Sackville	Queen	St. David	East	5
Sackville	Wilton	Oak	West	5
Sackville	Wilton	Oak	East	5
Salem	Shanley	North end	East	5
St. Joseph	1st la. w. of Yonge	Chapel	North	6
Shaw	Hallam	Shaw Pl.	West	5
Shaw	Arthur	Halton	West	5
Spadina	Bernard	Dupont	West	5
Spadina	King	Front	West	6
Spadina	111 ft. n. of Farley	Adelaide	West	6
South Drive	Sherbourne	Huntley	South	4
South Drive	Huntley	Scarth Rd	North	4
Scarth	Crescent	Roxborough	East	4
St. James	63 ft. e. of Rose	Parliament	North	5
St. James	Parliament	Rose	South	5
St. George	College	Russell	West	6
St. George	Bernard	987 ft. south	East	6
St. David	Sackville	Sumach	South	5
St. Lawrence	King	Eastern	West	4.5
St. Mary	North	West end	North	5
Stafford	King	Clifford	West	4
Stafford	King	Clifford	East	4
Spruce	Sumach	139 ft. e. of Gifford.	North	5
Surrey Pl.	St. Albans	Grosvenor	East	5
Smith	No. 98	Logan	North	5
Tiverton	First	South	West	5
Tecumseth	King	Farley	West	5
Tecumseth	King	Defoe	East	5
Taylor	Sumach	West end	South	3
Taylor	Sumach	River	South	4
Trafalgar	Gladstone	Dufferin	North	5
Turner	Niagara	230 feet west	South	4
Trefann	Queen	Sydenham	East	4
Teraulay	Agnes	Edward	East	6
University	Queen	Osgoode	East	6
Ulster	Euclid	Manning	North	5
Ulster	Bathurst	Manning	South	5
Ulster	Bathurst	Euclid	North	5
Wascana	Sumach	East End	South	4
Wascana	Sumach	East End	North	4
Wellington	Bathurst	Niagara	South	5
Wellington	Bathurst	316 ft. 5 in. east	South	4
Wellington	Bathurst	314 ft. 5 in. east	North	4
Wellington Pl	117 ft. w. of Spadina	Portland	South	6
Wellington	Tecumseth	19ft.6in.e.of Niagara	North	5

CONCRETE SIDEWALKS—*Continued.*

Length. Feet.	Curb. Class.	Curb. Length. Feet.	Completed.	Contractor.
843	5-in. concrete....	866.3	May 10, 1906	R. A. Rogers & Co.
884.5	"	886.5	May 10, 1906	"
480	"	480	Apr. 28, 1906	Ontario Concrete Pav. Co.
472.4	"	472.4	Apr. 28, 1906	" "
262.2	"	267.2	Sep. 27, 1906	" "
511.5	....	.....	Sep. 4, 1906	Day labor.
200.5	5-in. concrete....	200.5	Aug. 30, 1906	Constructing & Pav. Co.
341.6	"	6.9	July 24, 1906	Queen City Con. Pav. Co.
525.4	..... .	.....	Aug. 29, 1906	Toronto Con. & Pav. Co.
764	5-in. concrete....	36	July 20, 1906	" "
564.5	"	12	June 14, 1906	Gale Paving Co.
396.9	.....	.....	July 5, 1906	Day labor.
345.2	.....	.....	July 7, 1906	"
286.2	.....	.....	Aug. 1, 1906	Constructing & Pav. Co.
252.5	.....	.....	June 14, 1906	W. R. Payne.
331.5	.....	.....	Apr. 13, 1906	Day labor.
636	.....	.....	June 9, 1906	Gale Paving Co.
967.7	.....	.....	May 4, 1906	Excelsior Con. Pav. Co.
673.4	.....	.....	May 30, 1906	Queen City Con. Pav. Co.
682.7	5-in. concrete....	681	May 23, 1906	Grant Contracting Co.
632.5	....	.....	May 11, 1906	A. Gardner & Co.
766	5-in. concrete....	19	Apr. 28, 1906	Constructing & Pav. Co.
756.5	....	.....	Apr. 28, 1906	" "
303	....	.....	Apr. 24, 1906	" "
639.9	5-in. concrete....	634.4	Apr. 19, 1906	Grant Contracting Co.
646.5	.....	.....	Apr. 18, 1906	Ontario Concrete Pav. Co.
759.3	....	.....	Sep. 10, 1906	Queen City Con. Pav. Co.
918.8	5-in. concrete....	948.8	Aug. 18, 1906	Crescent Con. Pav. Co.
451.6	"	7.3	Aug. 7, 1906	Toronto Con. & Pav. Co.
279	"	281	July 27, 1906	W. R. Payne.
580	"	580	July 10, 1906	Queen City Con. Pav. Co.
390	5-in. concrete....	398	July 18, 1906	W. R. Payne.
254	"	235	July 16, 1906	Day labor.
443	"	443	May 11, 1906	Godson Contracting Co.
228.8	....	.....	Apr. 24, 1906	W. R. Payne.
509.7	.. ..	.....	Oct. 20, 1906	Ontario Con. Pav. Co.
304	5-in. concrete....	273	Oct. 3, 1906	Toronto Con. & Pav. Co.
1,044.7	"	1,033 7	Aug. 20, 1906	" "
746.2	"	671	May 29, 1906	Ontario Con. Pav. Co.
310.6	"	310.6	Aug. 2, 1906	Godson Contracting Co.
310.6	"	310.6	Aug. 8, 1906	" "
989	"	981.3	Aug. 9, 1906	Toronto Con. & Pav. Co.
330.9	... .	.....	July 14, 1906	J. H. McKnight.
309.7	.....	.....	July 14, 1906	"
1,166	5-in. concrete ...	14	July 10, 1906	Toronto Con. & Pav. Co.
308.8	"	308.8	May 11, 1906	Day labor.

CONCRETE SIDEWALKS—*Continued.*

Street.	From.	To.	Side.	Width Feet.
Wellington	Simcoe	120 ft. e. of Dorset	North	6
Wright	Roncesvalles	732 feet east	North	5
Wright	Roncesvalles	732 feet east	South	5
Wellesley	Sumach	243 feet east	South	5
Westmoreland	Hallam	Van Horne	East	5
Waterloo	Dufferin	Gladstone	South	5
Waterloo	Dufferin	Gladstone	North	5
Wolseley	Bathurst	Hackney	South	5
Wolseley	Hackney	Denison	South	5
Wolseley	Denison	Esther	South	5
Wolseley	Bathurst	Denison	North	5
Victoria	Shuter	Gould	East	5.5
Yonge	101 ft. n. of Front	King	East	10
Yonge	Buchanan	50 ft. s. of Albert	West	12
Yonge	Cottingham	Wickson	West	11
Yonge	King	Adelaide	East	11
Yonge	Adelaide	Richmond	East	11
Yonge	Richmond	35 ft. s. of Queen	East	11.7
Yorkville	Avenue Rd	Hazleton	North	5
Yorkville	Yonge	Hazleton	North	5

BRICK SIDEWALKS.

Crescent Rd	Yonge	705 feet east	South	5

CONCRETE SIDEWALKS—*Continued.*

Length. Feet.	Curb.		Completed.	Contractor.
	Class.	Length. Feet.		
614.1	....	.....	Apr. 19, 1906	Day labor.
732.5	5-in. concrete....	732.5	Aug. 8, 1906	Gale Paving Co.
732.5	"	732.5	July 25, 1906	"
269.1	"	273.1	July 4, 1906	Day labor.
907.3	.....	... .	June 25, 1906	Grant Contracting Co.
278	5-in. concrete....	50.1	June 12, 1906	Harvard & Leach.
358	"	27.1	June 13, 1906	" "
508.8	"	508.8	May 2, 1906	" "
361.8	"	356.2	Apr. 25, 1906	" "
217.5	"	219	Apr. 26, 1906	" "
837.4	"	851.4	Apr. 21, 1906	" "
1,202.8	"	1,192.2	Apr. 23, 1906	Crescent Con. Pav. Co.
495.6	6-in. concrete....	489	Oct. 10, 1906	Day labor.
2,395.7	"	2,633.7	June 25, 1906	A. Gardiner & Co.
339.7	....	.....	June 19, 1906	Queen City Con. Pav. Co.
425	....	.....	May 30, 1906	Constructing & Pav. Co.
424	.....	.....	May 30, 1906	" "
107	6-in. concrete....	107	May 17, 1906	Day labor.
444	....	.....	July 14, 1906	Grant Contracting Co.
1,368.8	.....	.....	July 17, 1906	Constructing & Pav. Co.
218,272.5		106,958.7		

BRICK SIDEWALKS.

714.3	....	.....	June 29, 1906	Ontario Con. Pav. Co.

TABLE No. 8.

Class of Pavement.	Total sq. yds. in City.	Total miles in City.	Square yards laid in 1906.	Year first laid.	Maximum grade of pavement.	Guaranteed period of years.	Maximum cost per sq. yd. 1906.	Minimum cost per sq. yd. 1906.	Average cost per sq. yd. 1906.	Remarks.
					%		$ c.	$ c.	$ c.	
Asphalt	1,115,804	63.71	200,445	1888	4.73	10	2.01	1.79	1.91	Heavy.
"	.....	.....	.....	.....	.....	.....	1.64	1.38	1.42	Light.
Brick on concrete	274,570	18.58	20,047	1 893	5.50	5	2.42	2.15	2.20	On 4-inch concrete.
Brick (blk)	.....	.....	.....	.....	.....	5	2.60	2.45	2.52	On 6-inch concrete.
Brick on broken stone	15,031	.842	.....	1899	.....	5	.....	.....	.....	None laid in 1906.
Brick on broken gravel	32,009	2.218	.....	1896	.....	5	.....	.....	.....	" "
† Cedar block	.....	.....	.....	1881	3.78	5	.....	.....	.....	" "
"	544,407	40.53	23,601	.....	.....	5	.....	.....	85	On gravel.
Gravel	75,000	5.83	.....	1880	.....	1	.....	.....	.....	None laid in 1906.
* Scoria and granite	83,375	4.817	.....	1884	.....	5	.....	.....	.....	
Macadam	649,027	54.39	23,463	.....	4.20	1	.....	.....	85	8 inches in depth.
Tar macadam	76,192	5.70	3,083	1900	3.70	1	.....	.....	1.50	
Bitulithic	88,585	5.98	40,218	.....	10.94	10	2.25	2.25	2.25	

On concrete.

* Street railway track allowance not included in total mileage.

TABLE No. 9.

GIVING MILEAGE OF CEMENT CONCRETE AND BRICK SIDEWALKS CONSTRUCTED IN THE CITY OF TORONTO.

Year.	Cement Concrete.	Brick.	Total.
Up to 1889	1.190		1.190
1890	1.426		1.426
1891	1.950		1.950
1892	1.508		1.508
1893	2.259		2.259
1894	1 137		1.137
1895	1.918		1.918
1896	0.612	0.204	0.816
1897	1.050	0.820	1.870
1898	2.107	1.190	3.297
1899	5.470	0.290	5.760
1900	15.227	0.038	15.265
1901	17.305	0.511	17.816
1902	27.360	0.049	27.409
1903	34.896	0.093	34.989
1904	31.058	0.001	31.059
1905	37.500	0.037	37.537
1906	43.536	0.130	43.666
Totals	227.509	3.363	230.872

TABLE No. 10.

CONCRETE WALKS CONSTRUCTED BY DAY LABOR, 1906.

Street.	Side.	From.	To.	Width in ft.	Kind of Curbing Constructed with Walk.
Allan Gardens		Central Fountain	South Gate	16	
Allan Gardens		Central Fountain	114 ft. west	16	
Anderson	N	University	Simcoe	4	Concrete
Bathurst	E	Dupont	North City limits	6	
Bay	E	Harbor	Lake	8	
Bellwoods	W	Queen	285 ft. 6 in. north	4½	
Bathurst	E	Queen	Farley	6	
Barton	S	Palmerston	125 ft. east	5	Concrete
Bernard	S	Walmer	Kendall	5	
Buller	N	Kippendavie	West End	4	Concrete
Bloor	N	Bathurst	139 ft. w. Albany	12½	
Baconsfield	S	Afton	Dundas	5	
Binscarth	S	Glen	Pelham	6	
Carlisle	W	St. Patrick	North Pt No. 34	3½	Concrete
Cowan Ave		Fire Hall, Approaches	to	30	
Cummings	N	DeGrassi	Bolton	4	
Charlotte	W	King	Adelaide	4½	
Charlotte	E	King	Adelaide	4½	
Chesley	S	Brock	East End	4	Concrete
Clarendon	N	Avenue Rd	Poplar Plains	5	"
Chapel	E	St. Mary	Irwin	4	"
Churchill	S	Ossington	254 ft. west	4½	"
Churchill	N	Ossington	264 ft. west	4½	"
Dupont	S	Bathurst	Albany	5	"
Dupont	S	Walmer	132 ft. e. Kendall	5	"
Dale	N	Glen	Maple	5	"
Exhibition		Art Bl'd'g	Poultry B'l'd'g		
Exhibition		Approach to Machinery Hall			
Exhibition		Approach to Process B l'd'g			
Exhibition		Approach to Press Bui lding			
Edward	S	Centre	University	5	
Esther	W	Grange	St. Patrick	5	
Esther	E	Queen	Wolseley	5	
Foster Pl	B	Elizabeth	East end	4	Concrete
First	S	172 ft. e. Logan	162 ft. further e.	4	"
Gordon	S	Sheridan	Dufferin	5	"
Gladstone	E	North limit No. 265	College	5	"

TABLE No. 10—*Continued.*

CONCRETE WALKS CONSTRUCTED BY DAY LABOR, 1906.

City's Tender Per lin. ft.	Next lowest Tender per lin. ft.	Actual Cost of Work included in Tender per. lin. ft.	Cost of Work not Included in Tender.	Cost of Work Included in Tender.	Total Cost of Work exclusive of interest on Money.	Total Cost of Work based on Contractors' lowest Tender.	The difference between the City's Cost & next Lowest Contractor.	
							Gain.	Loss
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
O. of C.	... ...	.109	sq. ft.	583 67	583 67	.....	.....	....
O. of C.	.....	.110	sq. ft.	199 34	199 34	.. ..	.....	....
1 00	1 02	1.012	1 67	141 71	143 38	144 27	89	....
84	90	.762	2 87	163 19	166 06	192 69	26 63	....
O. of C.	.....	1.038	60 43	332 89	393 32	.....	... ...	....
O. of C.	.....	.639	9 37	182 16	191 53	191 53	.... ..	....
81	84	.787	63 69	183 23	246 92	259 07	12 15	....
1 07	None	1.06½	1 99	170 20	172 19	172 19	68	....
65	67	.648	5 21	167 50	172 71	178 07	5 36	....
1 00	None	.781	8 95	176 23	185 18	.....	49 37	....
1 60	1 95	1.933	9 82	359 64	369 46	372 52	3 06	....
70	62	.60½	14 42	552 05	566 47	579 98	13 51	....
O. of C.	.....	.89½	35 83	458 43	494 26	.....	.....	....
88	98	.792	5 95	305 86	311 81	384 23	72 42	....
O. of C.	... ...	.....	... ..	431 39	431 39	.....	.....	....
61	None	.512	16 25	112 82	129 07	150 08	21 01	....
58	60	.576	5 91	235 19	241 10	250 65	9 55	....
58	60	.587	6 20	255 74	261 94	267 50	5 56	....
98	1 04	.88	5 79	258 59	264 38	311 24	46 86	....
1 15	1 19	.998	10 37	592 91	603 28	716 99	113 71	....
89	1 09	.993	30 93	290 67	321 60	349 76	28 16	....
1 06	1 08	.91½	22 39	230 93	253 32	295 05	41 77	....
1 06	1 08	.909	15 51	228 47	243 98	286 81	42 83	....
1 16	1 22	1.141	66 84	230 50	297 34	313 52	16 18	....
1 10	None	1.232	26 83	154 82	181 65	165 10	.....	16 55
O. of C.	.....	.771	26 19	601 10	627 29	....	.... ..	....
O. of C.	.....	.....	.....	654 74	654 74	... .	.. ...	.. .
O. of C)								
O. of C)	... ...	.....	.....	895 72	895 72	.....	.....	....
O. of C.	.....	.....	.....	117 73	117 73	.....	.....	....
72	74	.711	2 15	164 39	166 54	173 23	6 69	....
67	69	.604	30 34	172 42	202 76	227 13	24 37	...
O. of C.	.....	.86	2 77	216 12	218 89	.....	.....	....
98	1 05	.977	73 50	286 28	359 78	381 15	21 37	. .
1 00	1 05	.999	66 27	142 36	208 63	215 90	7 27	. .
1 13	1 14	1.013	89 49	505 61	595 10	649 23	54 13	....
1 12	1 16	.947	46 88	815 13	862 01	1,031 72	169 71	....

TABLE No. 10—*Continued.*

CONCRETE WALKS CONSTRUCTED BY DAY LABOR, 1906.

Street.	Side.	From.	To.	Width in ft.	Kind of Curbing Constructed with Walk.
Grenville	S	Elizabeth	West end	5	
Grace	W	994 ft. n. of College	500 ft. further n.	5	Concrete
Grace	E	994 ft. n. of College	500 ft. further n.	5	"
Grove	W	Foxley	Dundas	5	
Hagerman	S	Elizabeth	171 ft. e.	5	
Hagerman	N	Elizabeth	219 ft. e.	5	
Hepbourne	S	Dovercourt	Rusholme	5	Concrete
Hackney	W	Queen	Wolseley	3	"
Hackney	E	Queen	Wolseley	3	"
Hickson	S	St. Clarens	East end	5	
Humbert	S	Dovercourt	Brookfield	4	Concrete
Kensington	W	St. Patrick	Baldwin	5	
Kew Beach		Fire Hall, approaches	to	32.2	
Lowther	S	Spadina	165 ft. w.	5	Concrete
Lake	S	Bay	Point east	12	
Muir	N	Dufferin	Sheridan	4	Concrete
Mutual	W	Wilton	Shuter	5	"
Mohawk	C	Lake shore	500 ft. north	6	
North	W	St. Mary	Bloor	6	Concrete
North	E	St. Mary	Bloor	6	"
Pelham Place and Binscarth Rd.	S	Glen	Schoefield	6	
Parliament	W	Winchester	Prospect	6	Concrete
Queen	S	Duncan	John	12	
Queen	S	100 ft. w. of Niagara	Strachan	8.5	Concrete
Rusholme	E	Hepbourne	Bloor	5	
Rathnally	E	McMaster	Cottingham	5	
Richmond		Fire Hall, approach to		12	
Rusholme	E	College	452 ft. s. of Dewson.	5	
Reservoir Pk		South Gate	Rosedale entrance	4½	

TABLE 10—*Continued.*

CONCRETE WALKS CONSTRUCTED BY DAY LABOR, 1906.

City's Tender Per lin. ft.	Next lowest Tender per lin. ft.	Actual Cost of Work included in Tender per lin. ft.	Cost of work not Included in Tender.	Cost of Work included in Tender.	Total Cost of Work exclusive of Interest on Money.	Total Cost of Work based on Contractors' Lowest Tender.	The difference between the City's Cost & next Lowest Contractor.	
							Gain.	Loss
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
67	78	.666	1 95	116 61	118 56	138 37	19 81	....
O. of	C.	1.298	7 97	658 02	665 99	.....	.....	...
O. of	C.	1.239	22 14	626 50	648 64	.....	.....	....
63	67	.68	108 94	457 87	556 81	561 76	4 95	....
72	75	.711	2 54	122 30	124 84	131 54	6 70	....
75	80	.663	3 37	119 51	122 94	138 97	16 03	....
1 15	1 17	1.030	32 99	426 87	459 86	517 72	57 86	....
47	49	.394	16 99	100 31	117 30	141 70	24 40	....
47	49	.464	16 46	118 00	134 46	140 92	6 46	....
76	None	.644	3 30	189 74	193 04	227 12	34 08	....
95	97	.857	25 83	485 99	511 82	575 82	64 00	..
70	71	.585	113 92	469 79	583 71	684 40	100 69	....
None	None	.....	.....	{ 481 61 { 546 91	481 61 546 91	}	.....	....
79	82	.725 pr. s. ft.	1 71	118 83	120 54	136 10	15 56	....
None	None	.228	.....	402 90	402 90	.. ....	.....	....
95	97¾	.742	39 13	394 51	433 64	516 09	82 45	...
1 14	1 15	.983	117 84	573 09	690 93	788 29	97 36	....
O. of	C.	.746	10 56	335 82	346 38	.....	.....	....
75	75¾	.724	23 07	557 16	580 23	605 59	25 36	....
75	75¾	.724	10 77	567 42	578 19	603 89	25 70	....
O. of	C.	1.436	49 86	1,258 86	1,308 72	.....	.....	.. .
1 25 pr. sq. ft	1 27 pr. s. ft	1.026 pr. s. ft.	151 04	438 29	589 33	693 33	104 00	....
18	19	.164	9 79	769 07	778 86	897 85	108 99	....
1 64	1 85	1.725	56 97	1,248 25	1,305 22	1,395 44	90 22	...
73	None	.679	7 10	516 43	523 53	562 19	38 66	..
72	75	.711	2 92	222 95	225 87	238 04	12 17	....
.....	.....	.....	.....	202 55	202 55	.....	.....	....
65	67	.607	21 04	279 70	300 74	329 91	29 17	..
.....	.....	.....	.....	1,305 05	1,305 05	.....	.....	....

TABLE No. 10.—*Continued.*

CONCRETE WALKS CONSTRUCTED BY DAY LABOR, 1906.

Street.	Side.	From.	To.	Width in feet.	Kind of Curbing Constructed with Walk.
St. James	S	Parliament	Rose	5	
South Drive	S	Sherbourne	Huntley	4	
South Drive	N	Huntley	Scarth	4	
St. Joseph	N	Chapel	1st lane w. Yonge	6	
Sackville	W	Wellesley	North end	4	Concrete
Seaton Sq.	E	West Branch		4	
Seaton Sq.	N	South Branch		5	Concrete
St. Clarens	E	Dundas	Wyndham	5	"
Schofield	W	Binscarth	North end	6	"
Turner	S	Niagara	230 ft. west	4	"
Wellington	N	Simcoe	120 ft. e. Dorset.	6	
Wellesley	S	Sumach	243 ft. east	5	
Wellington	N	Tecumseth	195 ft. e. Niagara	5	Concrete
Yonge	E	67 ft. 8 in. n. Richmond	35 ft. s. of Queen	11.7	
Yonge	E	101 ft. n. of Front.	King	10	Concrete

TABLE No. 10—*Continued.*

CONCRETE WALKS CONSTRUCTED BY DAY LABOR, 1906.

City's Tender per lin. ft.	Next lowest Tender per lin. ft.	Actual Cost of Work included in Tender per lin. ft.	Cost of Work not Included in Tender.	Cost of Work Included in Tender.	Total Cost of Work Exclusive of Interest on Money.	Total Cost of Work based on Contractors' lowest Tender.	Difference Between City's Cost and next Lowest Contractor.	
							Gain.	Loss
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
68	70	.651	176 48	215 96	392 44	308 53	16 09	....
60	63	.56	1 99	222 52	225 51	246 93	21 42	....
60	63	.53	2 41	182 93	185 34	219 89	34 35	....
80	82	.793	37 99	396 80	434 79	448 40	13 61	....
98	1 09	.894	14 71	225 92	240 63	290 26	49 53	....
62	64	.514	3 75	95 42	99 17	122 15	22 98	....
1 10	1 16	.763	3 35	133 65	137 00	206 35	69 35	....
62	70	.585	55 29	534 67	589 96	621 66	31 70	....
O. of C.	.....	1.167	13 84	519 93	533 77	.. ....	.. ..	....
98	99	.906	32 06	212 99	245 05	264 71	19 66	....
O. of C.	.....	.791	7 51	486 19	493 70	.... ..	.....	....
75	76	.680	2 44	185 09	187 53	206 95	19 42	..
1 11	1 13	1.129	39 59	348 69	388 28	388 53	25	....
O. of C.	.....	2.217	3 00	237 27	240 27	.. ....	.....	....
2 25	2 30	2.262	15 39	1,100 80	1,116 19	1,134 57	18 38	....
				30,779 47	32,803 34		2,074 60	16 55
							16 55	
						Net Gain..	2,058 05	

TABLE No. 11.

PAVEMENTS.

No.	Street.	From.	To.	Class of Pavement.	Width in ft.	Length in ft.
1	Avenue Rd.....	Bloor	Davenport...	T. A. recon, con ..	14 0	2,289
2	Chestnut Pk. Dr.	Roxborough	655 ft. n. & e.	Macadam, 2nd class	21 0	655
3	Charlotte	King	Adelaide ...	V. B. on 4-in. con	24 0	427
4	Curzon	Queen	587 ft. n	Macadam, 3rd class	24 0	587
5	Dundas	Bridge.....	Bridge.....	T. A. recon., V. B.	9 10	337
6	Dundas	Queen	Arthur	T. A. recon., V. B., Devil Strip	3 5	1,880
7	Dupont	Bathurst ...	Walmer	Granite block T. A.	15 2	1,634
8	Gerrard	Pape	Leslie	V. B. on 6-in. con..	26 6	1,978
9	Gerrard	Pape	Leslie	Granite block T. A.	15 2	1,977
10	Gerrard	Leslie	Greenwood..	Granite block T. A.	15 2	1,396
11	Grace	994 ft. n. College	500ft. f'th'r n.	Grading	35 0	500
12	John.....	Queen	Grange	Macadam recon....	24 0	794
13	Ln. 1st w. Simcoe	Nelson	Richmond ...	V. B. on 4-in. con..	12 0	193
14	Lansdowne Av.	College	Bloor.....	Cedar block recon..	12 6	2,850
15	Lansdowne Av.	Intersection	of College ...	Granite block T. A.	15 2	117
16	Morrison	Adelaide .	South end ..	V. B. on 4-in. con .	21 0	207
17	Millstone Ln...	York	East end....	Asph. bl. on 4-in. con.	19 0	117
18	McCaul	Queen	College ...	T. A. recon., con., Devil Strip.	3 6	3,376
19	Pearl.....	Simcoe	Duncan	V. B. on 6-in. con..	24 0	512
20	Richmond	York	Victoria . .	Granite block T. A.	15 2	1,925
21	Royce	Lansdowne..	Ry. Tracks...	V. B. on 4-in. con..	24 0	2,868
22	Spadina Ave...	Queen	College	T. A. recon., V. B.. Devil Strip.	6 0	3,380
23	Scott....	Front	Wellington..	Granite block T. A.	4 11	299
24	Victoria	Queen	Richmond ..	Granite block T. A.	15 2	298
25	Wellesley	Sumach	243 ft. east..	Macadam, 3rd class	24 0	243
26	Wellington .. .	Scott.....	Yonge	Granite block T. A.	4 11	298
27	York.....	Approaches t	o Bridge....	Wood block	34 6	205
28	John, e.s.....	Queen	Grange ...	4-in. stone curb....	4″ x 24″	859 9

TABLE No. 11.

PAVEMENTS.

City's Tender.	Next Lowest Tender.	Cost of work not included in Tender.	Actual cost of Work included in Tender.	Total Cost of Work exclusive of Interest on Money.	Total Cost of Work based on Contractor's Lowest Tender.	Difference Between Cost of City's Tender and next Lowest Tender.	
						Gain.	Loss.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
None	None	None	3,879 04	3,879 04	.....	.....	.....
4,118 00	None	.....	3,602 34	3,602 34	.....	515 60	.....
2,933 00	2,971 00	99 57	2,781 76	2,881 33	3,070 57	189 24	.....
Order of Council		82 02	1,928 79	2,010 81	.....	.....	.....
None	None	.....	524 58	524 58	.....	.....	.....
None	None	.....	698 84	698 84	.....	.....	.....
Order of Council		3,333 04	13,947 32	17,280 36	.....	.....	.....
14,862 00	15,668 72	.....	12,690 14	*12690.14	.....	.....	.....
Order of Council ...		1,030 76	12,828 26	13,859 02	.....	.....	.....
Order of Council		621 27	8,206 90	8,828 17	.....	.....	.....
Order of Council		11 25	1,004 76	1,016 01	.....	.....	.....
1,612 00	None	345 81	1,378 60	1,724 41	.....	233 40	.....
721 00	764 00	105 69	717 55	823 24	869 69	46 45	.....
None	None	.....	2,852 67	2,852 67	.....	.....	.....
1,252 00	None	115 57	1,247 18	1,362 75	.....	4 82	.....
2,139 00	2,440 00	132 30	2,193 61	2,325 91	2,572 30	246 39	.....
None	None	None	1,521 39	1,521 39	.....	.....	.....
3,653 00	3,971 00	172 65	3,629 05	3,801 70	4,143 65	341 95	.....
12,236 00	12,987 00	.....	16,963 27	*16,963 27	.....	.....	.....
Order of Council. ...		.....	15,682 31	*15,682 31	.....	.....	.....
None	None	.....	2,869 36	2,869 36	.....	.....	.....
1,230 00	1,500 00	.....	See Wellington Street		.....	.....	.....
1,494 00	1,792 00	.....	See Richmond Street		.....	.....	.....
868 00	None	94 07	867 78	961 85	962 07	22	.....
2,145 00	2 496 00	.....	2,911 49	*2,911 49	.....	.....	.....
None	None	.....	2,084 80	2,084 80	.....	.....	.....
499 00	517 00	6 67	505 31	511 98	517 00	5 02	.....
		Totals ..	117517 10	123667 77		1,583 09	

*Work unfinished:—Amount of money expended up to end of year 1906.

TABLE No. 12.

Works Constructed as Local Improvements from 1892 to 1906 (Inclusive).

Class of Work.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	Total.
Asphalt pavements	9	7	7	4	3	4	14	28	27	25	24	26	33	30	39	280
Bitulithic	..	..	..	..	..	..	..	..	..	..	..	..	4	9	18	31
Brick	..	..	..	2	6	16	13	23	13	7	11	10	12	9	8	130
Gravel roadways	..	..	..	..	..	16	..	1	1	..	..	..	..	..	..	18
Cobble stone pavements	5	..	..	..	..	..	..	..	1	..	..	..	..	..	..	6
Stone setts	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	3
Macadam roadways	1	..	1	4	5	3	13	24	14	16	24	14	14	12	4	149
Tar macadam pavements	..	..	..	..	..	..	..	..	1	1	6	12	8	9	2	39
Cedar block pavements	20	14	6	7	3	7	19	20	24	12	10	6	3	6	3	160
Concrete	..	..	..	3	..	..	1	..	..	..	1	2	1	2	2	12
Scoria block	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Concrete and stone curb	..	..	..	..	..	..	..	..	..	1	3	4	6	15	23	52
Wood curb	..	..	..	..	..	..	..	..	..	3	1	1	..	..	..	5
Concrete sidewalks	6	3	6	11	6	13	25	37	85	118	188	236	247	276	359	1,616
Brick sidewalks	..	..	..	..	1	8	14	4	1	2	1	..	1	1	1	34
Stone flag	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Grading	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	5
Wood block	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
Vitrified block	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	5
	43	25	20	31	24	67	99	137	167	186	269	312	331	377	462	2,550

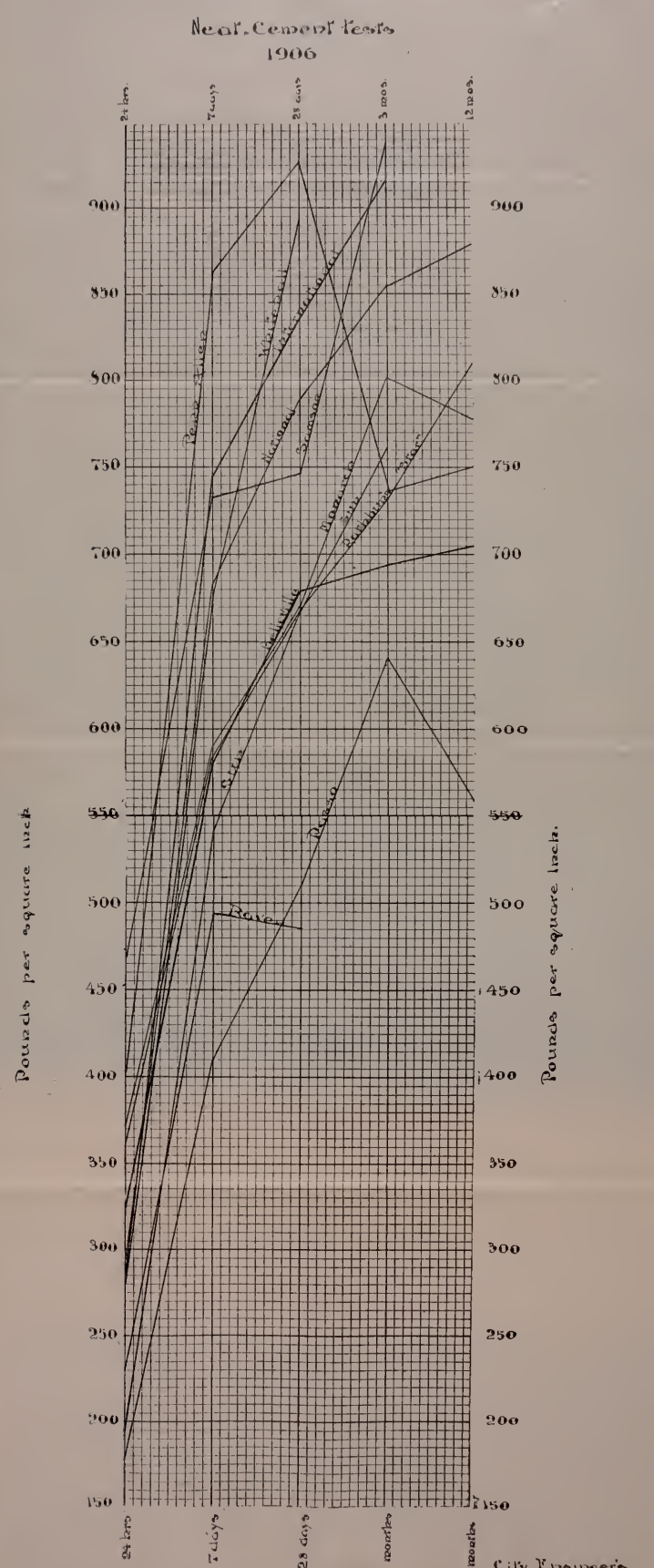
RECORD OF CEMENT TESTS, From July 1st 1905, to July 1st, 1906.

Brand.	No. of Samples tested.	*No. of Sample rejected.	No. of Briq'tts.		Soundness.	Specific Gravity.	Fineness in % on			Setting in Minutes.		Percentage of Water used in Mixing.		Tensile Strength in Pounds per square inch.										Remarks.
														Neat.					3 (sand) to 1 (cement)					
			Moulded.	Broken.	Faija Test.		Sieve No. 50	Sieve No. 70.	Sieve No. 100	Initial.	Final.	Neat.	3 to 1.	24 hours.	7 days	28 days.	3 months.	12 months.	24 hours.	7 days.	28 days.	3 months.	12 months.	
Belleville	44	3	425	402	4.5% failed	3.150	0.0	0.9	3.9	149	362	21.9	10.0	324	580	679	694	705	98	239	333	390	475	Canadian.
International	50	0	505	453	O.K.	3.180	0.0	0.8	3.4	153	405	21.7	10.0	286	745	837	917	....	95	328	412	457	....	"
Monarch	149	1	1540	1430	0.67% failed	3.184	0.0	1.7	4.7	144	361	21.3	10.0	372	590	671	802	778	118	268	361	448	481	"
National	169	0	1765	1651	O.K.	3.193	0.0	0.8	3.1	161	406	21.0	10.0	288	683	788	854	879	103	296	392	436	444	"
Passo	1	0	20	20	O.K.	3.010	0.0	0.5	2.8	155	360	22.0	10.0	178	407	510	643	557	82	175	293	382	436	German (slag cement).
Penn Allen	1	0	20	20	O.K.	3.130	0.0	3.0	6.5	30	415	20.0	10.0	403	862	927	736	750	77	390	450	451	494	United States.
Rathbun's "Star"	91	0	940	882	O.K.	3.194	0.0	1.9	5.4	173	402	21.1	10.0	361	583	669	731	809	116	271	372	430	469	Canadian.
Raven	2	1	20	19	O.K.	3.155	0.0	0.3	2.1	64	185	24.0	10.0	231	494	486	..	....	72	220	407	...	...	"
Samson	8	0	130	107	O.K.	3.113	0.0	1.5	4.4	125	331	22.3	10.0	468	733	746	938	....	134	294	341	438	....	"
Sun	16	5	150	136	37% failed	3.184	0.0	2.4	6.3	204	436	22.8	10.0	193	541	667	761	....	79	207	316	367	....	"
Whitehall	1	0	5	5	O.K.	3.130	0.0	5.6	12.9	240	480	21.5	.....	278	677	896	..	....	None moulded					United States.
	532	10	5520	5125																				

*Some of these samples marked rejected were held over, and the cement was used when sufficiently aged.

General tests
3 parts of sand to 1 of cement
1906.

Courtesy Engineering Office


Neat Cement Tests
1906
24 hrs.
7 days
28 days
3 mos.
12 mos.
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
Pounds per square inch
Peace Flange
Hopkinson
Atlas
Speed
Dragon
Alsen
Peerless Star
Saturn
Crib
Rose
Rover
24 hrs
7 days
28 days
3 months
12 months
City Engineer's Office
12:14:07

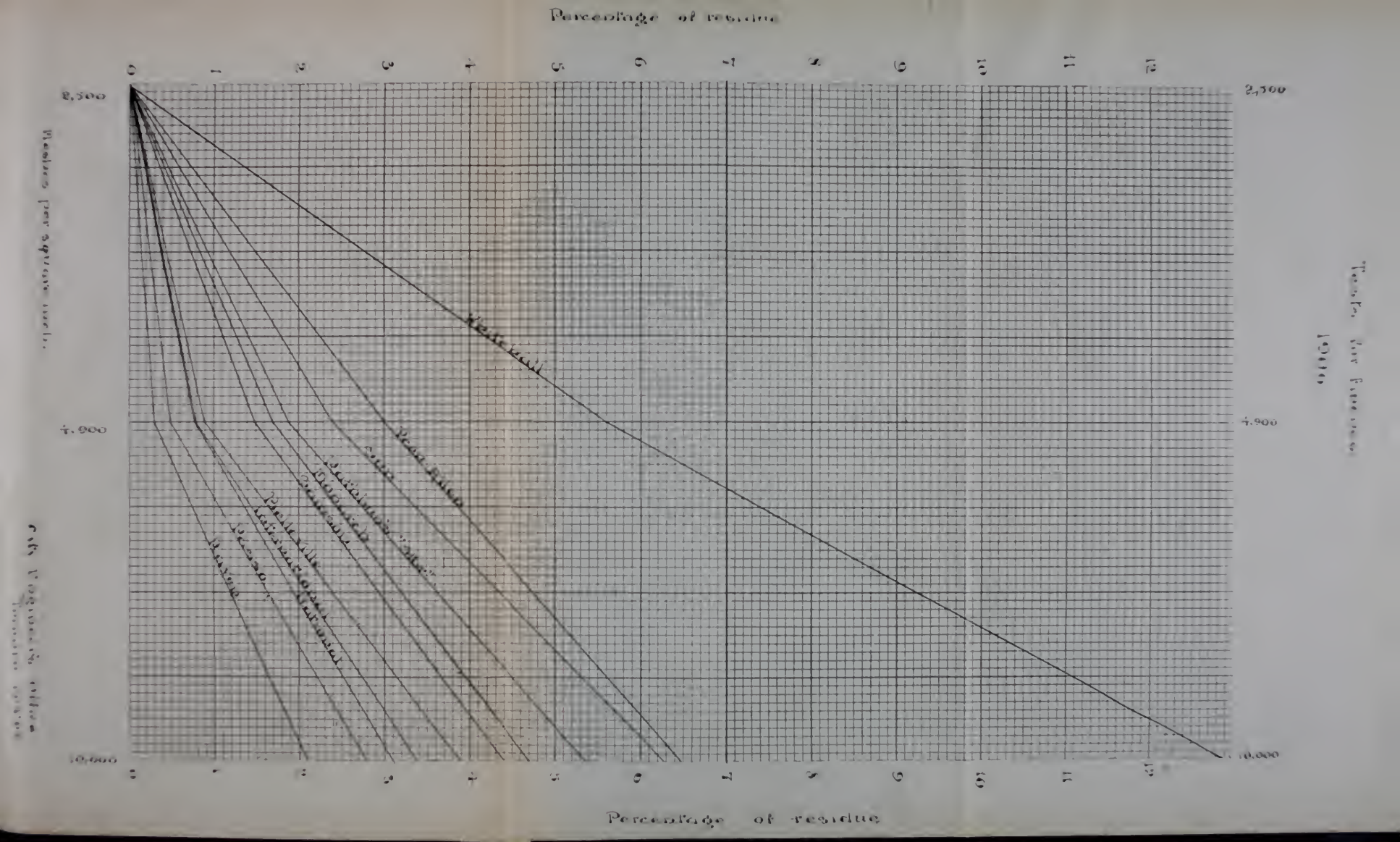

Percentage of residue
0
1
2
3
4
5
6
7
8
9
10
11
12
2,500
4,900
10,000
Pounds per square inch.
Tons per square inch.
Mean wall
Real value
Point
Dangerous value
Dangerous value
Real value
Mean wall
Percentage of residue

TABLE No. 13.

SHOWING COST OF REPAIRS TO TRACK ALLOWANCE, 1906.

Street.	Cost.
Yonge	$ 396 12
Queen east	2,527 54
Queen west	507 59
College	295 67
King west	240 47
King east	377 41
Sherbourne	701 10
Broadview	54 08
Bloor west	322 08
Bloor east	349 88
Dovercourt Rd	64 12
Dundas	1,530 48
Dupont	135 48
Bathurst	102 04
Lansdowne	66 64
Front west	102 55
Station	232 44
Spadina	26 88
Dufferin	38 89
Front east	79 53
Ossington	84 18
Carlton	408 39
York	71 59
Gerrard	53 47
South Drive	56 65
Glen Rd	87 79
Elm Av	22 79
Total	$8,935 65

REPAIRS AND MAINTENANCE OF BRIDGES, WHARVES, ETC., 1906.

CITY ENGINEER'S DEPARTMENT,
Toronto, December 31st, 1906.

MR. C. H. RUST,
City Engineer.

DEAR SIR :

Herewith I submit a statement of work done during the year :

LAMB'S BRIDGE.—The deck planking of this bridge has been renewed and the operating machinery adjusted. The trusses are getting very unstable and will require to be renewed unless a new and larger bridge is to be built here.

This bridge was opened during the time Bridge Tender was employed from April 25th to December 19th, a period of thirty-four (34) weeks, 2,095 times or an average of 9.2 per day. The largest number of times it was opened in one day was 35, July 2nd, and on 11 days it was not opened once ; this occurred in the months of November and December. The Bridge was opened 18 times in April, 179 in May, 295 in June, 315 in July, 385 in August, 442 in September, 297 in October, 137 in November and 26 times in December.

CHERRY STREET BRIDGE.—The operating machinery of this bridge was adjusted so that the bridge could be opened during freshets. The centre pier and abutments are constantly altering in position from sinking, so that the bridge could not be opened without some adjustments. In the near probability of this channel being closed, it is not worth while to spend any more than possible to keep the traffic over it safe.

GERRARD STREET BRIDGE.—This bridge has had its deck entirely renewed with new material, from joists to deck planking, and is now in first-class condition. Some of the Street Railway rails were renewed and gauge adjusted ; a large number of drain pipes were put in and drainage conduits from track gratings repaired.

CRAWFORD STREET BRIDGE.—A new wearing course has been put on this bridge and some decayed parts of trestles repaired. This bridge must be replaced very shortly by a new one. With some slight repairs it may stand another year.

SHAW STREET BRIDGE.—Some general repairs to deck planks and handrails have been made, but the bridge is in a very decayed condition and requires constant care to keep it at all safe for traffic. A serious accident may happen here any time. The bridge should be replaced by a new substantial structure at once.

YORK STREET BRIDGE.—The sidewalks on this bridge have been repaired and kept safe during the past year, but there will be required during the current year an entirely new sidewalk. The parapet handrailing at the south end on both ramps has been considerably damaged owing to careless laying of wood blocking with no allowance for expansion. These portions of the railing will have to be taken down and adjusted.

WINCHESTER STREET BRIDGE.—This bridge has nearly outlived its usefulness; had it not been for steel truss rods and screw buckles placed under bottom chords of main trusses early in the year there may have been considerable sag in the deck. Slight repairs were done to deck and handrail.

RIVERDALE PARK BRIDGE.—After the freshets early in the year which carried away the temporary centre support a new one was put in and other slight repairs made. This bridge must be renewed in steel as soon as possible, as the chords are very much decayed and the whole structure is bending toward the north.

STRACHAN AVENUE BRIDGES.—Some slight repairs were made to feet of bents which require constant watching. Some considerable repairs will be required to bents, deck and handrail during the coming season.

SHERBOURNE STREET BRIDGE.—In the summer of 1898 the deck of this bridge was renewed, but only the rail stringers and kerbs were replaced with new timber, the rest being old. It is now in a very decayed state and must be entirely renewed in the coming summer.

Danforth Avenue Bridge.—A new three-inch deck has been put on this bridge and handrail repaired and is in good condition for another year.

Dundas Street Bridge.—A new wearing course has been placed over the entire surface and the underplanking repaired where required. This bridge is in good condition.

Huntley Street Bridge.—Some slight repairs were done to the deck planking and the stairway from bridge to ravine thoroughly repaired or renewed where required.

Glen Road Bridge.—Some repairs to deck planking and sidewalks were done and the stairway to ravine thoroughly repaired or renewed where required. Some considerable repairs will be required during the coming season both to deck and sidewalks.

Summerhill Avenue Bridge.—This bridge is in good condition. It was built in the summer of 1905 by the County of York. It is of rather flimsy construction, being built on cedar posts some 25 ft. high.

North Glen Road Bridge.—This bridge is in seemingly good condition on examination last summer; the road stringers are much too far apart for City traffic and the drainage of deck unsatisfactory. This can be attended to when the deck has to be renewed.

Binscarth Road Bridge.—This structure is in fairly good condition and should go through the coming season without any repairs.

Castle Frank Bridge.—This bridge is in a bad condition, being very much decayed. As I am informed it is private property I simply report its condition.

Eastern Avenue Bridge.—Some repairs will be needed in the coming summer to the wearing course. The traffic over it is very heavy and continually increasing.

Dupont Street Culvert.—A new wearing course was put on this structure and some repairs and stays put to lining. Since street railway traffic has run over this culvert it has been very much shaken and should be renewed in brick or steel and filled up to roadway.

LAKE SHORE CULVERTS.—New wearing courses were put on each of those and supports repaired

ROSEDALE AND SHAW STREET CULVERT.—Are in fairly good repair, but they must be carefully watched and supports repaired and strengthened when required.

POPLAR PLAINS ROAD BRIDGE.—This bridge or culvert will need reconstruction when the permanent roadway is constructed. I would then recommend that it be extended to the full width of roadway. Some repairs are needed to keep it safe.

DOCKS, WHARVES AND SHEDS.

The roadway in front of the old ticket office of the Ferry Co. to the east end of Harbour Street will require renewal. It is much broken up by the heavy teaming during the fall.

The roadway from Harbour Street to Lake Street, also the planking on Lake Street to dock gates, will require renewal. Also the sidewalk from aforementioned planking to the Bay Street slip.

YONGE STREET DOCKS AND WHARF.—All the planking on this dock, lately in use by the Toronto Ferry Co. and Geddes, Wharfinger, will require considerable attention during the coming season; if said wharves are re-rented, a large quantity of repairs will be required.

TURBINIA DOCK.—Some repairs were made to deck planking and a new curb placed on edge of dock, new handrailing built between this wharf and the first one east. The walks at the head of these docks will have to be renewed and some considerable repairs made to face of cribs.

NEW ISLAND FERRY WHARF.—These wharves have been enlarged in width between five and six feet in order to accommodate the new ferry boats; the hinged flap at the north end widened, the gear removed, adjusted and replaced. New slips in six places were cut in the wharves for landing from the sides.

THE NEW BAY STREET FREIGHT SHED AND WHARF will require considerable repairs both to windows and doors. The west

side of Bay Street dock will require a very considerable amount of repairs and some reconstruction; owing to the heavy nature of the freight handled here the deck planks are crushed in and broken all over the deck.

Brock Street Wharf.—Some slight repairs were done on this wharf, but it requires constant watchfulness to keep it safe. It should be entirely renewed and raised to the level of the railways.

ISLAND BRIDGES AND WHARVES.

A small new wharf was erected on the east side of the Clandeboye Avenue Water-way for convenience of freight handling. The bridge at this point is raised by the frost and will require some repairs, also the steel bridge on Manitou Road will require new deck. The bridge at Turner's Baths may need considerable attention should the frost raise the piles.

DETAILS OF COST DURING SEASON 1906.

Bridges, etc.	Nails & Iron-work.	Tools.	Paint.	Sundries.	Lumber.	Labor.	Total.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Lamb's Bridge	.....	.....	1 24	.....	86 86	281 60	369 70
Cherry St. "	.....	.....	.. ..	.....	.....	228 00	228 00
Gerrard St. "	93 05	4 80	21 70	57 26	3,891 90	2,071 95	6,140 66
Crawford St. "	10 50	....	.....	4 90	337 50	199 02	551 92
Shaw St. "	.....	.....	.....	.....	5 10	.....	5 10
York St. "	4 45	.....	812 83	.....	72 22	55 94	945 44
Winchester St. "	215 31	....	.....	.....	171 61	200 00	586 92
Riverdale Pk. "	5 75	.....	.....	.. ...	9 59	50 90	64 24
Strachan Ave. "	6 30	....	.....	.....	49 04	93 80	149 14
Sherbourne St. "	. ..	....	.....	.....	27 00	196 22	223 22
Danforth Ave. "	.....	.....	....	.....	82 30	47 10	129 40
Dundas St. "	12 60	.....	74	.....	567 84	326 68	907 86
Huntley St. "	....	....	.. ...	.....	47 78	84 90	132 68
Glen Rd. "	....	.....	....	.. ....	5 16	124 36	129 52
King St. Subway	.....	35 98	.....	120 10	.....	102 90	258 98
Culverts	2 10	.....	.....	118 96	.....	85 60	206 66
Morrison Fountain, castings.	7 25	.....	.....	11 00	.....	94 41	112 66
							11,142 10

Docks, Wharves, Island, Life Saving and Free Bathing.

Island bridge and wharves.	.....	.....	.....	.....	80 98	74 20	155 18
Esplanade and City docks.	60 40	4 15	.....	5 41	657 99	887 60	1,615 45
Life saving stations	.....	2 00	2 30	282 12	... .	587 55	873 97
Free bathing "	.....	.....	14 61	1,085 81	164 55	1,337 95	2,603 92
Public conveniences	.....	.....	.....	741 39	.....	2,109 33	2,850 72
							8,099 24

GENERAL.

Drawings, estimates and specifications have been made during the year for various works suggested or authorized, among which are the following: Rebuilding 100-ft. of Queen's Wharf in concrete; Wallace Avenue footbridge, contract let; Lansdowne Avenue Subway, contract for substructure let; 15-inch Hydraulic Dredge, contract let; Sunnyside bridge over G. T. Ry. tracks at Sunnyside; bridges at Bathurst Street and Tecumseth Street, and other smaller matters.

LIFE SAVING STATIONS.

All the various stations have been provided with the necessary appliances, all of which have been regularly and systematically visited, and any of the appliances that were damaged or were missing were at once replaced and a careful search made for the missing one, often with success. It is necessary that these stations be extended in their usefulness by any device that may be secured. The new grapnels that were put out last season have been very useful. I am of opinion that all along our wharves should be placed looped chains within reach of anyone falling into the docks. Short permanent ladders should be placed at intervals. A lifeboat station should also be established at some central point, and as the present boathouse is now on property purchased by the Polson Iron Co., it will have to be removed. That will be a good opportunity to instal a life-saving station and boathouse combined, where a boat or boats could be ready at all times to patrol the Bay and Island waters. This boat or launch would enable the inspector to visit the stations much more frequently and rapidly. During the past year there have been some very

deplorable drowning accidents, to which we have, with what appliances in our possession rendered some assistance.

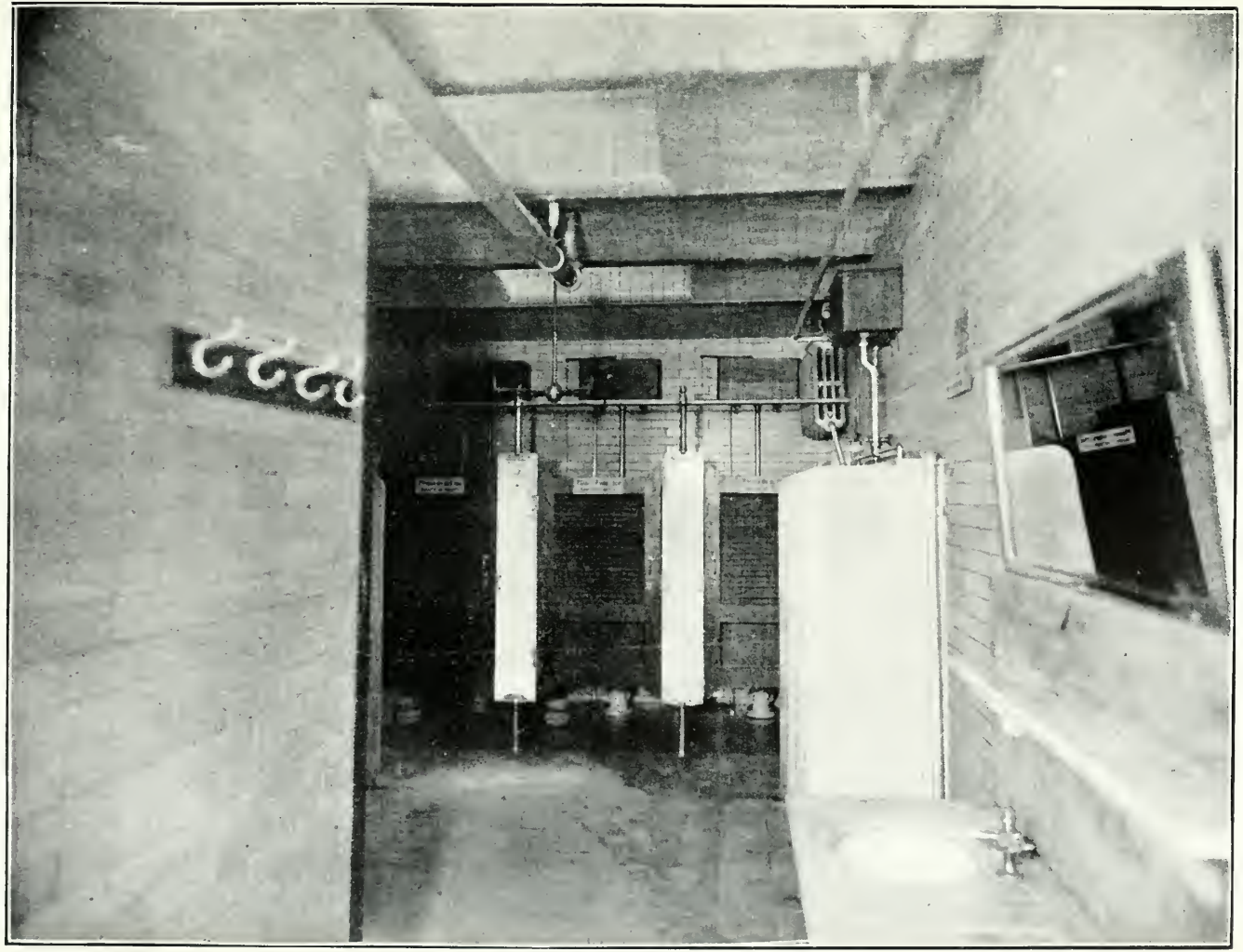
FREE BATHING STATIONS.

The public, you will note by this season's record of some 257,758 bathers, are taking more and more advantage of the small facilities provided for them, and I think the present temporary shelters we erect from time to time should be made permanent. I refer more directly to those on Fisherman's Island and on the Western Sand Bar The station at Sunnyside is very much congested, especially on the boys' side, and about 100-ft. of the shore east of this station should be hired or purchased. Some new bathing houses and shelters were erected early this year. The possibilities of this station are very large if suitable buildings were erected. Should the project of the roadway bridge at this point go forward a splendid pavilion could be erected with entrance directly from the bridge ramp. It is no doubt the finest piece of beach within easy access to the City.

ATTENDANCE AT FREE BATHING STATIONS, SEASON 1906.

	Sunnyside.		Western Sandbar.	Fisherman's Island.			Wildbine Avenue.	Don River.	
				By Boat.	By Land.				
	Boys.	Girls.	Boys.	Boys.	Boys.	Girls	Boys.	Boys.	Total.
May 24 to June 30	7,729	2,308	.....	.. ...	.. ...	.....	.....	.....	10,037
Wk. ending July 9	4,993	1,669	1,000	500	2,618	50	2,900	2,278	16,008
" " 16	6,217	2,967	3,027	1,490	1,503	140	2,316	2,863	20,523
" " 23	13,850	9,248	3,500	2,519	1,755	151	2,704	4,025	37,752
" " 30	14,150	10,400	2,300	1,567	2,481	205	2,740	4,731	32,100
" Aug. 6	10,348	7,019	3,345	1,942	1,971	190	2,449	4,836	38,574
" " 13	11,751	1,915	3,600	1,939	1,935	210	2,373	4,337	28,060
" " 20	8,203	5,808	3,003	1,360	1,541	252	2,040	5,008	27,215
" " 27	9,220	6,369	2,800	1,108	1,495	324	2,068	5,096	28,480
" Sep. 3	3,741	1,913	940	150	467	120	1,200	2,899	11,430
Sept. 3 to Sept. 17	.....	.....	.....	.....	.....	.....	... .	4,300	4,300
Sept. 3 to Oct. 15	2,535	744	.....	.....	.....	.....	.. ...	.....	3,279
	92,737	50,360	23,515	12,575	15,766	1,642	20,790	39,018	257,758

ENTRANCE TO LAVATORY, QUEEN ST. AND SPADINA AVE.



INTERIOR OF LAVATORY, QUEEN ST. AND SPADINA AVE.

PUBLIC CONVENIENCES.

The first of the new public conveniences, that on Cottingham Street and Yonge Street, was opened on February 11th, 1906, which makes 46 weeks to the end of the year, the average attendance per week being 2,173 persons, or per day 310 persons, making a total of 99,965 since its opening. An ornamental handrail has been placed around this convenience, making an enclosure that will be sodded in the spring. The largest attendance in any week during this period was on that ending September 9th, when there were recorded 2,831 persons.

The convenience at Spadina Avenue and Queen Street was opened on the 8th of April, which makes 39 weeks to the end of the year, the average attendance per week being 5,136 persons, or per day 733 persons, making a total of 200,323 since the opening. The largest attendance in any week during this period was on that ending October 21st, when there were recorded 7,855 persons.

The convenience on Toronto and Adelaide Streets has been in use 4 or 5 years, but only since April the 22nd of this year has any record been made of the number of persons using it ; counting from that time to the end of the year, a period of 36 weeks, the total number was 140,903, or per week 3,914 persons, or per day 652 persons. The largest attendance on any week during this period was on that ending September 9th, when there were recorded 7,352 persons. This lavatory requires a thorough renovation ; the ventilation is very poor indeed. I think the unsightly tower should be removed and a concrete stairway substituted, similar to that at Spadina Avenue. This could run from the south side on the centre of Toronto Street, and be protected with a neat iron railing. The ventilating column could be turned into an ornamental lamp post and ventilator combined.

Respectfully submitted,

JOHN WILLIAMS,
Assistant Engineer.

SEWERS, DRAINS AND SPECIAL WORKS.

CITY ENGINEER'S DEPARTMENT,
Toronto, December 31st, 1906.

MR. C. H. RUST,
City Engineer.

DEAR SIR,—Herewith I submit the Annual Report, showing in detail the work done under the supervision of this branch of the Department.

The following table shows the length in feet of sewers constructed during the year:

9-inch tile pipe	12,840	lin. ft.
10-inch cast iron pipe	1,152	"
12-inch tile pipe	22,531	"
15-inch tile pipe	1,349	"
15-inch tile pipe in concrete	4,670	"
16-inch cast iron pipe	1,300	"
18-inch tile pipe in concrete	11,173	"
48-inch steel pipe	140	"
Brick, 2 ft. x 3 ft.	944	"
" 2 ft. 6 in. x 3 ft. 9 in.	2,517	"
" 2 ft. 2 in. x 3 ft. 3 ft.	655	"
" 3 ft. circular	215	"
Box drain	829	"
Total	60,315	"

Or 11.42 miles.

The system of sewerage for the district east of Woodbine Avenue, on which work was commenced on the 1st May, is now nearing completion. With the exception of a short piece of iron pipe on the Lake front, all the drains have been laid. The septic tanks and bacteria beds have been constructed and the beds are now being filled with filtering material.

The large brick sewer on Roncesvalles Avenue and the storm overflow into the lake is now practically finished. The construction of the overflow will relieve this district and prevent all further cause for complaint from flooding.

There are 256.53 miles of sewers in the City.

During the year there were:

278 new manholes built;
82 manholes repaired;
716 new gullies built;
149 gullies repaired;
83 miles of sewers flushed and cleaned.

There are 71 automatic flush tanks in the City.

GENERAL SEWER REPAIRS.

During the year it was found necessary to take up and relay about 300 feet of the sewer on Robert Street, south of Russell Street, a serious cave-in having occurred at this point, completely blocking the sewer.

The old box drain on Ossington Avenue, south of Hallam Avenue, was found to be in a state of collapse, and in order to permit of a new roadway being laid on this street it was found necessary to reconstruct this drain along the boulevard.

During the winter the box drain sewer outlets into Ashbridge's Bay, which had been in a dilapidated condition for some time, were thoroughly repaired, a special appropriation having been granted to defray the cost of this work.

CLEANING GULLIES.

During the year the gullies all over the City were systematically cleaned, those on the main streets being given special attention. This work was found to be much more expensive than in previous years owing to the large amount of water used for street flushing.

STREET RAILWAY RECORDS.

During the year a daily record of the service furnished by the Toronto Railway Company was taken and a weekly report made to the Board of Control and the City Solicitor.

DREDGING SEWAGE DEPOSITS OUT OF SLIPS.

Sewage deposits were dredged from the following slips during the year:

Yonge Street sewer outlet.
Jarvis Street sewer outlet.
Parliament Street sewer outlet.
Church Street slip.
Berkeley Street slip.

The Canadian Ship Building Co's. slip was also dredged, the total quantity of material removed being 15,360 cubic yards.

The following table shows the number of lineal feet of private drains constructed during the year.

	6-in.	9-in.	12 in.	15-in.
January	2,096	165	...	....
February	1,365	33	...	....
March	3,165	331	....	....
April	6,063	165	....	....
May	5,609	396	....	....
June	6,920	323	....	....
July	6,594	410	....	....
August	6,303	667	....	....
September	5,456	482	....	33
October	7,865	445	....	....
November	6,201	544	66	....
December	1,506	227	33	....
	59,233	4,188	99	33

In addition to the above 89 private drains were repaired and 28 flushed

The total length of private drains laid during the year was 63,553 lineal feet or 12.04 miles, making an increased total over that of 1905 of 11,970 feet or 2.27 miles, which goes to show the continued growth and prosperity of the City.

DAY LABOR WORK.

In Table No. 2 will be found a list of the sewers constructed by day labor, showing a total length of 8,981 feet laid at a cost of $11,852.38. It will be noticed that on the eight sewers on which the Department was the lowest tenderer a total saving to the City of $2,901.11 was made, to which should be added the extra cost of inspection had the work been done by contract.

Table No. 1 gives a list of all the streets upon which sewers were constructed during the year.

TABLE No 1

Showing Sewers Constructed During the Year 1906

Street	From	To	Size	Description	Length	No. Manholes	No. Gullies	No. P. D. Connections	Average Depth	Soil	Inspectors	Contractor
Oriole Rd	St. Clair	Lonsdale	18 in.	Tile pipe	1526 ft.	5	12	101	10.87	grey sand	F. J. Carrette	John Maguire
Adelaide	Bay	York	18 "	"	874	4		43	12 43	clay	C North	J H McKnight
Armstrong Ave	Dufferin	West End	15 "	"	1308	5	8	95	11.68	"	R Hutcheson	J. F. Connolly
Robert	Russell	268 ft. south	18 "	"	268				14.11	"	R Patterson	City.
Olive Ave	Manning Ave	Palmerston	12 "	"	623	3	4	34	10.44	blue clay	F. J. Carrette	John Maguire
Crawford	Bloor	Thorn	18 "	"	1015	3	6	80	10.02	sand	R. Hutcheson	J F. Connolly
Wellesley Ave	Logan Ave	West End	12 "	"	660	2	4	58	12.45	blue clay & quick s'nd	"	"
Barton Ave	Bathurst	135 ft. east	12 "	"	168	1		3	12.80	hard pan	R. Patterson	City
Grace	970 ft. n. to College	to a point 500 ft. further north.	18 "	"	505	3	2	36	12.95	dry, hard blue clay	F. J Carrette	Toronto Con. & Pav. Co.
Edward	Elizabeth	Chestnut	12 "	"	185	1		10	8.72	hard pan	R Patterson	City
Shaw	Bloor	Dupont	18 "	"	3042	10	20	235	13.48	sand & clay	R Hutcheson and C. North	J F Connolly
Waverley Rd	The Lake	1048 ft. s. of Queen	2 ft. x 2¼ ft	Box dr'n	367				2.34	sand	Wm. Douglas	City
Mill and Trinity	Cherry	Gas House	12 in.	Tile pipe	900	3		1	7.66	clay	R. Patterson	"
Wascana Ave	170 ft. e Sunnach to	a point 120 ft. further east.	12 "	"	110	1		8	11.11	sand	"	"
Avenue Rd	St. Clair Ave	Lonsdale Avenue	18 "	"	1545	5	10	120	12.59	sand & clay	C North	J. H. McKnight
Wilbam Ave	Edwin Ave	West End	12 "	"	276	2	2	15	10 33	sand	R. Patterson	City
			48 "	Ste'l pipe	140							
			2¼ ft x 3¾ ft	Brick	2547							
Roncesvalles	The Lake	Constance	2¼ ft. x 3¾ ft.	"	655					blue clay	F. J. Carrette and Ben Leeman	Toronto Con. & Pav. Co.
			3 ft cir.	"	215							
			2 ft. x 3 ft.	"	944							
Poplar Plains and Davenport Rd	Dupont	290ft. n Macpherson	12 in	Tile pipe	760	4		23	11.77	clay	R Patterson	City.
Schiller Ave	Poplar Plains Rd	407 ft. west	12 "	"	452	2	2	24	10.18	sand & clay	F. J. Carrette	J. H. McKnight.
Poplar Plains Rd	450 ft. n Cottingham	St. Clair Ave	15 "	"	2345	9	13	139	12.94	clay & sand	Ben Leeman	Con & Pav. Co.
Ehn Ave	Nanton Cres	Hawthorne Ave	12 "	"	351	2		10	10.28	clay	R. Patterson	City
St. Clar Ave. and Forrest Hill Rd	Avenue Rd	Lonsdale Ave	18 "	"	1955	8	10	127	10.54	sand & hard clay	B. J Leeman	John Maguire.
Springhurst Ave	Cowan Ave	Spencer Ave	12 "	"	250	2	2	7	10.37	clay	R. Patterson	City
Hamptou Ave	Hogarth Ave	Danforth Ave	12 "	"	1144	5	8	82	11.53	blue clay (very wet)	W. W. Moss	J. H. McKnight
St. Clarens Ave	Wyndham	85 ft. south	12 "	"	132	1		5	7.27	sand & clay	R. Patterson	City.
Bartlett Ave	VanHorne	145 ft. north	12 "	"	177	1		5	8.52	"	"	"
Marjory Ave	Dagmar Ave	Gerrard	12 "	"	910	4	2	57	8 93	sand	G Pype and B. Leeman	John Maguire.
Brock Ave	418 ft. n. Cobourg	Bloor	15 "	"	1017	3	4	80	12.71	wet sand	Thos. Madigan	Godson Cont. Co.
1st Lane s. Bloor	Balmuto	1st Lane e. Balmuto	12 "	"	166	2		5	8.27	sand	R. Patterson	City.
Eastern Ave. and Woodward Ave	Morley Ave	Queen	12 "	"	1004	6	6	66	4 86	soft diggi g	W L. Wells	J F. Connolly.
Ossington Ave	Manchester Ave	468 ft. south	3 ft. x 3½ ft.	Box dr'n	462				5.53	clay	R Patterson	City.
Harcourt Ave	Carlaw Ave	Pape Ave	12 in.	Tile pipe	622	3	2	42	11.52	blue clay	W. L. Wells	J. F. Connolly.
Gerrard	"	Logan Ave	12 "	"	637	3	4	35	9.79	bl. s'd (wet)	B. Leeman	J. H. McKnight.
Parkway Ave	College	Dundas	12 "	"	1005	4		64	10.77	sand	W. W Moss	"
Yarmouth Rd	Shaw	Miles Place.	12 "	"	705	2	4	48	9.81	clay	"	John Maguire.
Montrose Ave	Bloor	678 ft. south	12 "	"	678	2	4	48	12.21	"	W. L. Wells	J. F. Connolly.
Boustead Ave	500 ft. w. Roncesvalles	to 300 ft. further west	12 "	"	300	1		19	7.70	sand	R Patterson	City.
Gladstone Ave	Lindsay Ave	130 ft north	12 "	"	163	2		3	9.87	"	"	"
Bedford Rd	116 ft. s. Dupont	a point 125 ft further south	12 "	"	160	2		8	9.04	hard pan	"	"
High Level Pumping Station			9 "	"	275			1	9 12	clay	"	"
Hewitt Ave	Roncesvalles Ave	700 ft. west	12 "	"	750	4	1	44	9.35	sand	"	"
Liszt Ave	Poplar Plains Rd	West End	12 "	"	652	3	2	44	11.95	hard pan	W L. Wells	E. Axworthy.
Gerrard	Pape Ave	Galt Ave	12 "	"	1074	3	4	67	10.91	sand & b'n	W. W Moss	John Maguire.
Dresden Ave	Carlaw Ave	Pape Ave	12 "	"	620	3	2	48	12.29	blue clay	"	"
Garue Ave	Shaw	Miles Place	12 "	"	708	2	4	40	10.63	clay	R. Patterson	City
Guelph Ave	Carlaw Ave	Pape Ave	12 "	"	602	3	2	30	11 45	very wet & boggy	W. L. Wells	E. Axworthy
Russett Ave	990 ft. n. Bloor to a pt	332 ft. furth'r n	12 "	"	324	1	2	25	10 19	hard pan	R. Patterson	City.
Dewson	Rusholme Rd	Dovercourt Rd	12 "	"	425	2	2	18	9.36	blue clay & run'g sand	W L. Wells	E. Axworthy.
Jersey Ave	Evans Ave	991 ft. n.	12 "	"	1,015	5	4	56	9.72	clay	R Patterson	City
Eastern Ave	Logan Ave	Morse	12 "	"	306	2		20	4.38	"	Wm. Hill	John Maguire.
Danforth Ave	Broadview Ave	Pape Ave	18 "	"	In progress						F Carrette and Madigan.	T Godson Con. Co.
Hurst Pl	Homewood Ave	East End	12 "	Tile pipe	160	2	1	2	9.29	sand	Wm. Douglas.	City
Summerhill Ave	Shaftesbury	500 ft. n	12 "	"	In progress					"	W W. Moss	John Maguire
Alcorn Ave	Avenue Rd	453 ft. e	12 "	"	"					bld. ld sand	Ben Leeman	J. F Connolly
Dupont	Christie	700 ft w			"							
Mark	The Don	River	12 "	Tile pipe	614	3	2	28	11.50	made gr'nd	Wm. Wells	E. Axworthy.
Chestnut	Queen	Armouries	12 "	"	822	2		1	13.37	clay	R. Patterson	City.
St. Clar Ave	Avenue Rd	Oriole Rd	18 "	"	413	2	2	27	10.29	clay	R. Hutcheson	J. F. Connolly
Woodbine Ave	200 ft n. Queen.	Lake Front	9 "	"	1,749	6		53	8.90	sand & clay	G R Carrette, s end, & W Wells, n. end.	For C & P Co.
Kippendavie Ave	Queen	Lake Front	9 "	"	1,470	6		94	6.93	" at s. end	C. North	"
Kenilworth Ave	Queen	Lake Front	15 "	"	1,349	5		104	8.54	sand & clay	G R Carrette	"
Waverley Rd	200 ft n Queen.	Lake Front	9 "	"	1,634	7		112	10.26	" at s. end	C North	"
Kenilworth Ave	Queen	150 ft. n. Queen	9 "	"	170	1		8	6.06	sand & clay	"	"
Lee Ave	200 ft. n Queen	Lake Front sewer	9 "	"	1,540	7		105	7.29	"	"	"
Herbert Ave	Queen	200 ft. n. Queen	9 "	"	220	1		10	8.49	"	"	"
Elmer Ave	Queen	200 ft. n Queen	9 "	"	220	1		13	8 01	"	"	"
Belhan Ave	Queen	200 ft n. Queen	9 "	"	220	1		10	9.51	"	"	"
Wheeler Ave	Queen	200 ft n. Queen	9 "	"	220	1		12	9 37	"	"	"
Hammersmith Ave	Queen	200 ft n. Queen	9 "	"	220	1		12	12 44	"	"	"
Queen	Lee Ave	Elmer Ave	12 "	"	1,589	7		90	10 66	"	Wm Hill	"
Queen	Lee Ave	285 ft. e Hammersmith	9 "	"	1,245	6		91	12 63	"	C North	"
Queen	Elmer Ave	Woodbine Ave	9 "	"	625	1		29	10 79	"	"	"
Kew Beach Ave	Woodbine Ave	East End	9 "	"	820	6		54	5 00	old marsh	Wm Hill	"
Lake Front	Septic Tanks	Kenilworth Ave	16 "	Cast Iron	1,300 6 in.	6		10	7 91	" under sand on top	"	"
Lake Front and private property	Kenilworth Ave	Lee Ave	10 "	"	1,151 10 "	4		28	7 07	"	"	
Violet Ave	Lee Ave	Lonty Ave	9 "	Tile pipe	365	2		12	5 73	clay & sand	C North	"
Leary Ave and Al Fresco Lawn	Queen	1,157 ft s., thence westerly to Lee Av	9 "	"	1,079	4		95	8.37	"	C North and W Wells	"
Boller Ave	Kippendavie	West End	9 "	"	268	2		10	6 79	"	G R Carrette	"

TABLE No. 2.

SHOWING THE COST OF SEWERS CONSTRUCTED BY DAY LABOR DURING THE YEAR 1906.

Street	From	To	Size	Description	Length	City's Tend'r.	Next Lowest Tender.	Total cost of Work exclusive of Interest	Difference betwe'n Actual Cost and Lowest Contr'tor's Tender.	
									Loss.	Gain.
					ft. in.	$ c.	$ c.	$ c.	$ c.	$ c.
Barton Ave	Bathurst	135 ft. east.	12 in	Tile	168	No tender.		289 52		
Edward	Elizabeth	Chestnut	12 "	"	185	"		245 90		
Waverley Rd	The Lake	1,048 ft. s. Queen		B'x Dr'n	367	"		604 68		
Mill and Trinity St.	Cherry	Gas House	12 "	Tile	900	"		848 22		
Wascana Ave	176 ft. e. of Sumach	120 ft. further e	12 "	"	110	"		130 11		
William Ave	Edwin	West End	12 "	"	276	579 00	699 00	325 48		373 52
Poplar Plains and Davenport Rds	Dupont	a pt. 290 ft. n. Macpherson.	12 "	"	760	1,805 00	1,979 70	1,355 31		624 39
Elm Ave	Nanton Cres	Hawthorne	12 "	"	351	No tender.		501 74		
Springhurst Ave	Cowan	Spencer	12 "	"	250	390 00	442 00	202 96		239 04
St. Clarens Ave	Wyndham	85 ft. south	12 "	"	132	No tender.		109 85		
Bartlett Ave	Van Horne	145 ft. north	12 "	"	177	"		144 36		
Lane 1st s. of Bloor	Balmuto St to 1st la. e. Balmuto		12 "	"	166	"		214 74		
Ossington Ave	Manchester	468 ft. south	3' x 3 6"	B'x Dr'n	462	1,350 00	1,388 00	1,318 87		69 13
Boustead Ave	500 ft. w. of Roncesvalles	300 ft. further west.	12 in	Tile	300	No tender.		167 73		
Gladstone Ave	Lindsay Ave	130 ft. north	12 "	"	163	"		200 18		
Bedford Rd	116 ft. s. Dupont	125 ft. further s	12 "	"	160	"		265 87		
High Level Pumping Station			9 "	"	275	"		346 39		
Hewitt Ave	Roncesvalles	700 ft. west	12 "	"	750	1,211 00	1,225 00	676 71		548 29
Garnet Ave	Shaw	Miles Pl	12 "	"	708	1,082 00	1,106 00	794 84		311 16
Russett Ave	990 ft. n. Bloor	332 ft. further n.	12 "	"	324	575 00	613 00	393 46		219 54
Jersey Ave	Evans Ave	991 ft. north	12 "	"	1,015	1,590 00	1,599 00	1,082 96		516 04
Hurst Pl	Homewood Ave.	East End	12 "	"	160	No tender.		244 75		
Dupont	Christie	700 ft. west				In progress				
Chestnut	Queen	Armouries	12 in	Tile	822	No tender.		1,387 75		
										2,901 11

UNDERGROUND WORK CONSTRUCTED BY THE BELL TELEPHONE COMPANY DURING 1906.

	Conduit Ft.		Duct Ft.	
	Ft.	In.	Ft.	In.
Branch at Crawford and Queen	95	4	190	0
" Parliament and Winchester	391	2	1,260	4
" Colborne into Traders Bank	12	0	24	0
" Queen and Victoria	80	4	160	8
" Yonge into Lawlor Building	20	0	.....	
College Street main	5,875	7	57,945	6
" " branches	2,544	4	4,793	2
Branches at Ossington, Christie and Bathurst, under C.P.R. Tracks	83	8	167	4
Mains under C.P.R. and G.T.R. at Brock Avenue	321	0	2,568	0
Brunswick Avenue main	3,239	9	43,970	3
" " branches	1,147	3	2,294	6
Branch into Excelsior Life Building on Victoria Street	44	6	89	0
" at Dovercourt and C.P.R.	25	0	50	0
Bellevue Avenue main	2,141	6	49,497	0
" " branches	56	0	224	0
St. Patrick Street main	1,684	7	6,738	4
" " branches	982	11	1,965	10
Huron Street main	594	3	2,607	0
" " branches	243	3	633	9
Nassau Street main	875	0	3,500	0
" " branches	381	7	763	2
Bathurst Street main	741	10	2,967	4
Arthur Street main	1,333	11	5,335	8
" " branches	956	9	1,749	4
Total	23,871	6	189,534	2

Brick Manholes on	Parliament and Winchester	1
" "	College Street	18
" "	Brunswick Avenue	8
" "	Bellevue Avenue	3
" "	Denison Avenue	2
" "	St. Patrick Street	4
" "	Huron Street	1
" "	Nassau Street	2
" "	Bathurst Street	2
" "	Arthur Street	4
		45
Concrete manholes on	Euclid Avenue	1
" "	Harbord Street	1
	Total	47

This work was commenced May 23rd, 1906, and completed Dec. 5th, 1906.

UNDERGROUND WORK CONSTRUCTED BY THE TORONTO RAILWAY COMPANY DURING 1906.

Street.	Side.	From	To.	Conduit Feet.	Duct Feet.
				Ft. In.	
Frederick	E.	Power House	King	518	11,808
King	S.	Frederick	Church	1,390	29,134
Church	W.	King	Carlton	4,592	41,690
Carlton	N.	Church	Yonge	970 9	7,746
Yonge	E.	Carlton	Bloor	3,432	41,596
Bloor	S.	Yonge	Avenue Road	2,008 6	24,122
Avenue Road	E.	Bloor	Davenport	2,331 6	18,963
Davenport	N.E.	Avenue Road	C. P. Ry.	1,966	15,744
Dupont	N.	Huron	Christie	4,786 6	38,894
Christie	E.	Dupont	Bloor	3,087 6	24,700
Bloor	S.	Christie	Dovercourt	3,033	24,264
Dovercourt	E.	Bloor	Dundas	4,451	44,666
			Total	32,566 9	323,327

32,566 ft. 9 in. ditch opened.

323,327 conduit feet.

86 manholes.

This work was commenced on May 29th, 1906, and completed Nov. 10th, 1906.

UNDERGROUND WORK CONSTRUCTED BY THE TORONTO ELECTRIC LIGHT COMPANY DURING 1906.

Street.	Side.	From.	To.	Conduit Feet.	Duct Feet.
				Ft. In.	Ft. In.
Scott	W.	Esplanade	Front	312 6	7,500
Spadina	E.	Queen	Adelaide	754	8,948
College	S.	Lane west of Henry		83	249
Charles	N.	Yonge		480 9	480 9
			Total	1,630 3	17,177 9

This work was commenced April 25th, 1906, and completed October 24th, 1906.

SYSTEM OF SEWERAGE FOR THE DISTRICT EAST OF WOODBINE AVENUE.

Sewers.—The total length of sewers laid in this district is 17,935 feet, serving a population of approximately 11,000, which it is estimated will contribute 550,000 gallons of sewage per day.

Tile pipe sewers are laid on all streets north of the Lake Front, varying from 9 inches to 15 inches in diameter. The Lake Front sewer, into which all sewers from the north discharge, is constructed of 10 inch and 16-inch cast iron water pipe.

At the foot of Kenilworth Avenue and 250 feet west of Woodbine Avenue, pumping stations are constructed raising the sewage 10.2 feet and 22.25 feet respectively, the latter lift discharging the sewage into the inlet channel of the septic tanks.

Each pump well has a reservoir space holding 2,375 gallons, and is provided with a duplicate pumping plant consisting of two 4-inch centrifugal pumps, those at Kenilworth Avenue being driven by five horse-power alternating motors, and those at Woodbine Avenue by 7½ horse-power motors, all automatically controlled

Disposal Works.—The septic tanks and bacteria beds are arranged in such a manner and at elevations that allow a continuous passage of sewage through the tanks, alternating gear and bacteria

beds without any intermediate mechanical assistance. The tanks are in triplicate, each 100 feet x 14 feet x 7 feet deep, and the bacteria beds are in three groups of four each, the sewage, however, only flowing through one tank and having contact with one bed, which is sufficient for complete purification

The whole of this work is constructed of concrete, the walls being in proportion of four of three-quarter inch broken stone, three of sand and one of cement; and the roofs of the septic tanks three and a half of three-quarter inch stone, one and a half of sand and one of cement.

At the north end of the septic tanks is constructed an inlet channel into which the sewage from the pumping station is discharged and which feeds the three septic tanks through eight-inch valves, allowing any one tank to be disconnected for cleaning purposes. The liquid then passes through four twelve-inch submerged openings and creates no disturbance in the sludge on the bottom of the tank, or the scum on the surface.

At the south end of the tank are the cleansing chambers, cleansing pipes, outlet channel and main effluent carrier. The cleansing chamber arrests any suspended matter which may find its way through the outlet pipes during the time of abnormal flow. The cleansing pipes are laid level with the tank floor, and are used for emptying the tanks, or for draining off the insoluble matter which collects on the bottom of the tank.

All three tanks are covered with a 3-inch concrete roof, reinforced with expanded metal and supported by 9-inch x 6-inch concrete beams at 6 feet 6 inches centre, reinforced with corrugated steel bars.

Ventilators and inspection manholes are placed at regular intervals throughout the length of the tank

The action which the sewage undergoes in these enclosed tanks consists of the breaking up of all organic matter by the anaerobic bacteria, the result of the decomposition being the production of ammonia, carbonic acid gas, hydrogen and methane.

From the tanks the effluent passes through a 10-inch cast iron pipe laid in the extreme south wall of the bacteria beds at an eleva-

tion one foot below the high water level in the tanks, and is delivered on to the alternating distributing gear, each set of which controls one group of four beds and from which it is automatically distributed and discharged by a series of floats operated by the rise and fall of the sewage in the beds.

There are twelve bacteria beds in all, each 50 feet x 28 feet x 4 feet 6 inches deep, and filled four feet deep with a half-inch furnace slag. The sewage is distributed through six lines of 6-inch weeping tiles placed 6 inches below the surface of the filtering material, and is collected through 13 lines of 3-inch weeping tiles placed on the floor of the beds.

The operation of the distributing gear is as follows :—

The effluent runs on to one bed, rises in the discharge well of the same bed and in the float chamber, actuating the one next to fill; the bed now full discharges the one standing full and at the same time closes the discharge and opens the delivery valve of the bed next to fill. Thus each bed in turn receives the sewage which is retained until the one next is full, when it is emptied and stands empty to aerate, awaiting the next cycle, when the same operation is gone through.

The disposal plant is protected on all sides by tongued and grooved sheet piling, driven to a depth of 14 feet, and opposite each cross wall is a concrete buttress supported on piles driven 16 feet.

The approximate cost of the construction of the above works, exclusive of land damages, amounts to :—

Sewers and Pumping Machinery	$42,607 00
Disposal Works (Alternating Gear and Filtering Material)	28,255 00
	$70,862 00

Respectfully submitted,

J. D. SHIELDS,
Assistant Engineer.

ACCOUNTANT'S STATEMENT OF EXPENDITURE FOR 1906.

ACCOUNTS.	$ c.	$ c.	$ c.
GENERAL WORKS.			
Bridges, repairs and maintenance of	10,401 91		
Cleaning gullies	6,594 82		
Engineering and expenses	29,846 95		
General purpose	19,505 76		
Permanent crossings	1,668 61		
Roadways	44,703 79		
Sidewalks	13,829 54		
Snow cleaning off sidewalks	4,509 77		
Street tablets and house numbering	1,883 55		
Weed cutting	1,052 45		
Private drains	50,348 03		
	184,345 18		
Less amounts paid to City Treasurer for private drains	60,854 58		
		123,490 60	
SPECIAL WORKS.			
Asphalt repairs	30,979 98		
Albert Street, bicycle path	44 75		
Bay Street concrete walk, e.s. Lake Street to Harbor	566 03		
Block D, Ferry Dock	803 93		
Burnfield Avenue, road repairs	159 26		
Dredging slips	6,823 00		
Esplanade and City docks, wharves, etc	1,512 29		
Exhibition Grounds, concrete walk	1,667 20		
Express and cabmen's shelters	14 13		
Free bathing	2,584 77		
King Street subway, handrail	230 79		
Lansdowne Avenue, subway	12 40		
Lake Shore Road protection	2,348 33		
Life saving	891 48		
Maintenance of lavatories	2,902 72		
New public conveniences	5,136 11		
New hydraulic dredge	40,707 26		
New stone crusher	3,533 92		
New City yard, foot of Princess Street	602 44		
Ossington Ave. box drain	1,318 87		
Painting York St. Bridge	1,213 33		
Pontoons for sand pumps	3,465 00		
Carried forward	107,517 99	123,490 60	

ACCOUNTS.	$ c.	$ c.	$ c.
Brought forward	107,517 99	123,490 60	
Repairs to box drain, Ashbridge's Bay	1,139 98		
Reconstruction of track allowance	15,904 32		
Reservoir Park concrete walk	1,350 79		
Resurfacing University Ave	2,870 07		
Roadway e.s. Block D. Lake St. to South End	1,055 84		
Sand pump No. 1, maintenance	6,625 61		
" No. 2, "	4,483 31		
Snow cleaning, crossings	2,617 18		
Stone, House of Industry	137 35		
Straightening the Don	50		
Street Railway Matters	7,569 49		
Technical School Grounds concrete walk	154 90		
Track allowance, reconstruction	18,595 21		
Tug "National," maintenance	612 17		
		170,634 71	
ISLAND COMMITTEE.			
Cleaning and grading streets	34 90		
Cleaning weeds from lagoons	647 96		
Island Park wharf repairs, west side	10 00		
" pumping station, new boiler	1,325 46		
" Water Works	3,958 55		
Repairing bicycle path	177 76		
" bridges	90 00		
Sidewalk repairs	220 32		
		6,464 95	
LOCAL IMPROVEMENT WORKS.			
Pavements	535,805 37		
Sewers	113,936 75		
Sidewalks (permanent) 217,651 10			
" (wooden) 2,869 40			
	220,520 50		
Railway pavements	141,442 41		
Gradings, openings, extensions, etc	10,472 59		
Personal and departmental accounts	82,794 49		
		1,104,972 11	
			1,405,562 37

Respectfully submitted,

W. McCARTNEY,
Accountant.

ACCOUNTS.	$ c.	$ c.	$ c.
WATER WORKS BRANCH.			
Maintenance.			
Maintenance of distribution	46,834 64		
Main pumping station	53,218 59		
" " coal	36,348 63		
Meter, machine and blacksmith's shop	13,671 33		
Hydrants and valves	5,797 30		
Store house	2,039 99		
Reservoir	7,528 61		
High level station	14,230 37		
Cartage	6,547 80		
Miscellaneous	275 79		
		186,493 05	
Construction.			
House services	75,899 16		
Less amount paid Treasurer for sundry services	12,954 73		
		62,944 43	
Renewals.			
House services	7,251 32		
Short lengths and extra fire hydrants	2,481 46		
Dead ends, Danforth Ave	1,285 03		
	11,017 81		
Less amount paid Treasurer:			
Scrap iron and brass 307 86			
Sundry extensions of old mains 832 35			
Hydrants returned from streets 270 25			
	1,410 46		
		9,607 35	
SPECIAL WORKS.			
High pressure fire system	139,425 42		
New engine and hose, high level station	22,988 89		
New engine, main pumping station	45,694 06		
New 6-ft. steel conduit	6,668 85		
Tunnel and connections	19,635 90		
		234,413 12	
New meters		10,712 65	
36-in. special main, Bathurst Street	7,333 92		
24-in. " Front Street	3,337 61		
Carried forward	10,671 53	504,170 60	

ACCOUNTS.	$ c.	$ c.	$ c.
Brought forward	10,671 53	504,170 60	
20-in. special main, Dupont, St. George to High Level Station	286 75		
16-in. special main, St. George Street, Dupont to Bloor	294 57		
16-in. special main, Queen Street, Sumach to Don	738 95		
16-in. special main, Queen Street, Don Bridge to Broadview	3,279 94		
12-in. special main, Queen Street, Dundas to Gladstone	133 09		
12-in. special main, Don Esplanade, Cornwall to Gerrard	48 92		
12-in. special main, Poplar Plains Road	298 24		
12-in. " Sterling Road	3,602 89		
12-in. " Spadina Ave	1,528 50		
12-in. " Strachan Ave	1,491 52		
12-in. " Front St., *re* electrolysis	629 00		
6-in. special fire main, Eastern Ave	628 82		
6-in. " " grand stand, Exhibition	361 16		
6-in. " " Jefferson Ave	19 06		
6-in. " " Mincing Lane	201 33		
6-in. " " Mowat Ave	14 58		
6 in. " " Natalie Street	7 47		
6-in. " " Niagara Street	168 24		
6-in. " " Radcliffe Ave	1,270 03		
6-in. " " Winchester Street	57 33		
Lowering mains, Bain Ave	630 51		
" " Brock Ave	75 45		
" " Edwin Ave	209 54		
" " Hammersmith Street	164 59		
" " Havelock Ave	96 07		
" " Logan Ave	12 34		
" " Margueretta Street	78 20		
		26,998 62	
Paid mains		4,521 09	
Revenue mains	31,051 69		
Personal and departmental accounts	20,117 51		
		51,169 20	
			$586,859 51

Respectfully submitted,

W. McCARTNEY,
Accountant.

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27
T7A2
1906
Toronto. Dept. of Public Works
Report of the city engineer

[redacted]

Engineering

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